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ABSTRACT

The College of Education Libraries Research Project was commissioned by the Department of Education and Science at Didsbury College of Education, Manchester, England. The topics investigated included the aims and objectives of college of education libraries, effective use of library materials, funding, book selection methods, staffing requirements, staff and student library use, and student book buying habits. Data for the report were gathered from surveys, questionnaires, use studies, circulation analyses, existing statistics, inventories, budgets, and various types of visits and investigations. The study was comprehensive, covering all the standard in-house library functions, plus interlibrary loans, audiovisual materials, and bookstores. There are numerous tables, statistics, and graphs interspersed throughout the text. The appendixes are in a separate volume (IR 001 265). (LS)

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COLLEGE OF EDUCATION LIBRARIES RESEARCH PROJECT

FINAL REPORT

Volume 1 - Report

Commissioned by the Department of Education
and Science

W.H.Shercliff.

D.M.Tipper.

C.A.Needham.

IR 001 264

DIDSBURY COLLEGE OF EDUCATION MANCHESTER.

JANUARY 1973

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PREFACE

Following two reports by members of Her Majesty's Inspectorate on college libraries in 1961 and 1964, and the further development of ideas within the Department, the Department of Education and Science agreed that it would be desirable to support a research project into College of Education Libraries. A draft outline for a possible investigation was prepared within the Department in 1969. In 1970 Mr. W.H. Shercliff was appointed as Research Director; a Steering Committee was formed, and after considerable discussion the following five objectives were agreed:

(1) To establish the objectives of the college library and the essential needs and types of use by students and staff.

(2) To find ways of measuring the effectiveness of money spent on books, binding and equipment, and to throw light on the adequacy of present rates of expenditure in relation to what the college library should be achieving in support of the educational objectives of the college. To consider the possibility of cooperation between colleges and with the other institutions, and possible economies arising from this and from the accessibility of other libraries.

(3) To find effective ways of measuring the productivity of college library staffs and to consider the efficiency and adequacy of present staffing arrangements.

(4) To consider the present utilisation in college libraries of space for storage, study, instruction and the work of the library staff and to look at future needs in these areas in the light of the findings of (2) and (3) above.

(5) To identify and assess what means of encouragement and what types of instruction increase effective library use and student satisfaction.

It was hoped that the Project would not only produce information for the DES to help them determine the levels of provision necessary for college libraries, now that a regular system of grants had been established, but also that from the analysis of library situations it would provide much useful information for practising librarians.

It was also agreed to confine the Project to the main body of colleges, namely the general colleges of education, therefore omitting specialist colleges and teacher-training departments in Polytechnics. As the work proceeded it became clear that the team would not be able to cover the whole programme implied by the five original objectives. The Project had originally been intended to run for fifteen months, but time and funds were extended to just over two years, and it was then agreed to concentrate on the first three objectives. Objective five urgently needs a separate investigation.

In January 1971 Miss D.M. Tipper, formerly Deputy Tutor Librarian at Edge Hill College of Education, was appointed as Research Fellow. Miss C.A. Needham joined the team in December 1971. Part time clerical assistance was also engaged, and in early 1971 an electronic calculator was purchased. Additional clerical help was also engaged from August 1972. We also had much voluntary help, as well as some paid help, from students in certain colleges.

A Steering Commmittee was established comprising representatives of the Department of Education and Science, the ATCDE, the Institute and School of Education Librarians, the NUS, College of Education Librarians and Principals, and other library research agencies such as the LMRU at Cambridge, as well as the members of the research project. The Steering Committee's members were as follows:

SI Miss K.M.P.Burton	DES (Chairman)
SI Mr. J.K.Brierley	DES
HMI Mr. W.S.Fowler	
Mr.W.H. Shercliff	Librarian Didsbury College of Education, (Project Director)
Miss D.M. Tipper	Research Fellow
Miss C.A. Needham (from December 1971)	Research Assistant
Mr. R. Clayton	Principal, Matlock College of Education
Mr. A.J. Edwards	Librarian, Christ Church College of Education, Canterbury.
Mr. D. Logan (until January 1972)	National Union of Students
Mr. J. Wilson (from January 1972)	
Mrs. J.V. Marder	Librarian, University of Southampton School of Education.
Mr. A.G. Nokes	St. Mark and St. John College of Education, Chelsea.
Mr. J.L. Schofield	Assistant Director of Research, Library Management Research Unit, Cambridge University Library.
C.H. Saville) (until Sept. 1972)) D.M. Forrester) (from Sept. 1972))	Alternates: DES Teachers' Branch II
A.C. Jones) A.N. MacGregor) P.H. Sewell)	Alternates: DES Libraries Branch

Mr. G.J. Griffiths represented the Library Association as their observer at the Committee meetings.

The Steering Committee met six times between July 1970 and November 1972, receiving a report from the Director and Research Fellow on each occasion, and offering comment on the various surveys and draft reports which we were able to produce as the Project progressed. We are most grateful for the constructive help and encouragement given to us by the Committee.

In December 1970 the Steering Committee agreed to set up a Research Methods Sub-committee to advise the research team in its work. This consisted of Mr. W.H. Shercliff, Miss D.M. Tipper, Mr. A.N. MacGregor (OSTI), Mr. J.L. Schofield, (LMRU, Cambridge University), Mr. R. Duchesne (ADP Study, Bath University), and Mr. J. Urquhart (LMRU). The Sub-committee met three times, and provided most useful and practical help.

The Governors and Principal of Didsbury College agreed to provide accommodation, and the Manchester Education Committee handled the Project's administrative and financial arrangements. The Steering Committee decided that it was desirable, as far as time allowed, to seek the cooperation of eight general colleges of education in providing data and conducting surveys. These were chosen to represent, as fully as any eight can, the existing varieties of size, geographical location, A.T.O. and B.Ed. degree arrangements, teaching method and college ethos, voluntary or maintained status, day or residential facilities, mature or young students. Full statistical descriptions of these colleges are found in Appendix II, Table 1. In the report they have been ranged in order of size, and so as to preserve anonymity as far as possible designated by the letters A - H.

During the course of the project many visits were made to the eight cooperating colleges and in connection with some parts of our work, to many other colleges. We are most grateful to the cooperating colleges, especially their Principals and their hard pressed library staffs for the exacting work which they have done on our behalf, often in their own spare time and without which no final report could ever have been produced.

We exchanged information with the Director of the research project on library cooperation in the Sheffield region. Because of the existence of this project, we did not proceed far in investigating regional cooperation for college libraries. Some of our ideas and initial findings were discussed at the annual conferences in 1971 and 1972 of the Colleges, Institutes and Schools of Education Libraries group of the Library Association. The team also contributed to the DES/LMRU conference for college librarians at Cambridge in 1971. A conference of the cooperating librarians and members of the Steering Committee was held in September 1972, and some critical problems of the final report were discussed.

We would like to express our grateful thanks for the sympathetic help we received throughout the Project from the officers of DES Teacher's branch II and for the invaluable assistance of Cambridge University Library Management Research Unit in connection with Part II and Part IV and in particular for the idea of the Failure Survey. We also received much help on frequency of use investigations from the Lancaster University Library research team.

Our special thanks are due to the long suffering staffs of all the colleges which participated in our research and especially to the staff of Didsbury college library which acted as host to the project. We also gratefully acknowledge the help of our typists, Mrs. Ena Pattinson, (up to September 1972) Mrs. Joyce Burtonshaw and Mrs. Edith Jones (from September 1972).

We are grateful too, to the City of Manchester for agreeing to publish this report.

During the course of the project three issues of a Newsletter were produced to report on progress made to the steering Committee members, the participating librarians and many others who expressed an interest in our work. One further publication, The reservation system: an examination of its contribution to an effective circulation system in a college of education library, was published in Education Libraries Bulletin No.44, Summer 1972.

The views expressed in this report are entirely those of the research team and do not in any way reflect those of the commissioning Department.

January 1973

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INTRODUCTION

This report is the final publication of all the investigations which the team have carried out during the project. It covers the first three of the five areas of investigation. Firstly the aims and objectives of college libraries are determined, then the efficient running of the libraries' day to day business are examined and comments made on the successes and failures of their operation. There follows a discussion of the appropriate levels of finance to support acquisition programmes and comments on methods of selection. The crucial area of appropriate library staffing is next examined and finally the results of surveys of use in nineteen college of education libraries are reported along with a short investigation of a further source of supply for students, namely the books which they buy. There remains a certain amount of partially used data, some preliminary internal reports and memoranda and other papers which will, for the time being, be kept and which may be of use as starting points for subsequent research. We have provided in later pages a summary of recommendations, and a summary of areas where we think further research is important for purposes of validation,updating or extension of our work,and where our ownoriginal objectives were not met.

It is not to be expected that in this area of research in college of education libraries, which is, as far as we know, a field in which there has been very little previous research, neat and conclusive recommendations will emerge in our report. Although in some areas we have made recommendations, in others we have, we hope, rather brought to light the chief considerations affecting the solution of problems. Librarians will need to consider their own situations in the light of our findings and take from our report whatever is most helpful to improve the understanding and management of their own library economy. We have tried to encourage new approaches and widen the choices available to librarians in matters of policy. We hope that the detailed discussions of the data we have obtained will take place, and the decisions and priorities of existing libraries be reconsidered. In particular we believe college librarians should be much more critical of their policy, methods and organisation, and to help them in this they should regularly acquire much more vital management information than they do at present. At the same time we must report our admiration for the way that college librarians, often severely hampered by lack of staff and poor physical accommodation, have met the challenge of the very rapid expansion of college responsibilities in the last seven years. Libraries have grown enormously in size and complexity during this time.

We have only been able to take occasional note of the changes in the role of colleges of education arising from the government's White Paper, Education: a framework for expansion, because it came too late to affect most of our work. Much of what we say, however, will apply with equal force whatever the exact role of the college, and in most cases, our findings and proposals have been stated in such a way that adaptation can be made to meet the new circumstances of college libraries in the future.

SUMMARY OF RECOMMENDATIONS

PART II

Services could be improved by introducing variable loan systems and/or a recall system, but these are expensive in staff time. Reservation systems would be more efficient if users were asked to indicate the date by which the item would cease to be useful. Students need more help in using the catalogue, especially for subject searches. The failure survey and frequency of use checks showed a need to maintain and increase library stocks, especially in selected areas. The growth of library busines of all types is further evidence for the need to increase staffing.

PART III A

Consideration to be given by the DES and local authorities to raising the level of bookgrants according to the points system shown on the claim forms illustrated in Tables 6 and 7, the value of the point being updated in relation to book and periodical prices. Further consideration is needed to test out and build upon the most flexible, fair and practicable ways of measuring college libraries which we have produced. The definitions in Appendix III A 3 and the table covering the geographical isolation factor need to be included in any new recommendations.

PART III B

More time must be made available for the wise selection of materials and there are great advantages in subject specialisation within the necessary close cooperation between library and teaching staff.

PART IV

There are backlogs in many areas of library work owing to staff shortages. Existing standards are unsatisfactory because they do not take into account the varying factors; such as: amount of business, type of college, number and type of acquisitions etc. From the data describing the quantity and quality of college library services, 8 formulae have been produced and applied in the four colleges and in 12 other colleges. What is now required is the opportunity to validate this method of assessing staffing requirements by allowing some colleges, experimentally to claim in accordance with it, rather than any other recommended standard to see if the formulae work. However, students and staff in all colleges of education should receive the same library provision.

PART V A

All students make heavy use of their own library in relation to total library use. Other library use is effected by geographic situation and the regulations and adequacy of libraries in the area. College libraries need to be reasonably self sufficient. Libraries need to know the patternof use within the library in order to decide priorities. Where possible internal use could be encouraged.

PART V B

There is a need for liaison between lecturing staff, librarians and students in drawing up student book lists.

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SUMMARY OF AREAS NEEDING FURTHER RESEARCH

1. Objective 4 of our original proposals

   To consider the present utilisation in college libraries of space for storage, study, instruction and the work of library staff and to look at future needs in those areas in the light of the findings of 2 and 3 above.

1. Objective 5 of our original proposals

   To identify and assess what means of encouragement and what types of instruction increase effective library use and student satisfaction.

PART II

Further research in this area can only be carried out if librarians first collect the necessary statistics.

Investigations into the benefit gained by the reader from his use of the library and a closer analysis of his real needs is called for.

Ways of assessing loan periods for particular groups of books, other matters affecting library policy and the extent to which this impinges on library education could be investigated. Before such research is carried out, however, the librarian should ask himself whether he can use the result he is likely to obtain in any practical way. All new systems set up must also be carefully monitored so that flaws within them can be put right before they become serious.

Comparative investigation is required into the cost, staff time, length of delay to readers and the likelihood of further demands by other readers in obtaining items by purchase or through NLL.

PART III A

Research is required to establish probable growth rates and future size of stocks in college libraries, with perhaps regional stores for little used materials transferred to a designated regional research library, so that colleges only need to retain a large collection of currently active and useful material.

Continuing research is necessary through a suitable agency which, in response to changed circumstances, can test and amend recommendations made by our initial research.

PART IV

Further experiments are needed in all general colleges for the validation and improvement of our formulae. Adaptations of it may need to be investigated for use in specialised colleges or colleges with more confined or expanded roles in the future. Experiments in the employment of manual and technical staff are needed where appropriate work exists, especially in the larger colleges. The possibility of automatic acquisition, cataloguing and charging systems through regional cooperative schemes should be investigated as this would release more staff time for aiding readers individually and in group learning situations.

PART V A

It would seem profitable for future research to investigate the following areas:-

1. Students and staff who do not use libraries, and therefore probably in our case failed to return their questionnaires to find out why this is so.
2. The factors which discourage students from studying in a library.
3. The types of material for which other libraries are used.

4. The possibility of other types of cooperation between libraries in a given area.
5. The way in which students spend their time in the library. Activity sampling is probably called for to investigate how students browse, how long they really spend searching for known titles etc.

6. The effect of main subject of study on library use. In the past, surveys have usually been stratified by year group. Future surveys could usefully be stratified by subject group.

It would be most enlightening also to obtain in any survey the users' own comments on their library use. It was found that very little response was obtained to the one open-ended question we asked concerning reasons limiting other library use. There is, therefore, an apparent need for carefully worded questions asking students about their use of any libraries, and the extent to which libraries fulfil their needs.

PART V B

Further investigations on the lines used in our brief surveys would be useful especially to discover how the links between students needs, subject specialist knowledge and teaching needs of lecturers, and library bibliographic knowledge may be made most effective. Experiments could be set up to show if better advice given to students, and good bookshop facilities lead to more book buying.

SUMMARY OF REPORT

PART I

AIMS AND OBJECTIVES OF COLLEGE OF EDUCATION LIBRARIES.

The library's aims are closely related to those of the college. Sections 2-6. Students must be prepared to be effective citizens and teachers for the 20th. and 21st. century. Section 2. Three objectives are set out in which the library fulfils its part in these aims. Section 7.

1. To provide appropriate materials at all levels.

2. To provide access to these and externally located materials.

3. To foster awareness and encourage interest in the use of learning resources, now and in their teaching.

Eight ways of developing the Third Objective are shown. Sections 9-11.

The Second Objective is divided into three parts and the functions of each part described. Sections 12-14. Four pre-conditions concerning levels of staffing, finance and accommodation are laid down and described. Section 19.

PART II

EFFECTIVE USE OF LIBRARY MATERIALS

Library use is measured by analysis of circulation figures, Section 2, Reservation, Section 13, and interloan systems, Section 25, and by failure surveys, Sections 14-15.

Issue statistics for the eight colleges give figures for annual borrowing which vary from 38-71 books per student. Section 2. These figures are affected by length of loan periods, and factors determining these are discussed. Section 3. Recall systems are recommended. Section 2. Loan periods varied according to type of user, but this was unsatisfactory. Section 3. Differential periods based on demand are suggested. Section 4.

Restricted loan collections received three times as much use as their proportion of total stock would lead one to expect. Section 4. At College A, 33% of single copy titles in this collection were not issued in one year, compared with 42% of main library books. Section 4. Variable loan policies are advocated after collaboration with Lancaster University. Section 5. This restricted loan collection was most used for Education and English literature. Section 5.

Over two-thirds of the books at College A were returned by date due, but most of the rest were returned within a week after that. Section 5. Multiple failure at three colleges occurred for 5%-14% of titles failing. Section 6. Case studies are shown of some titles for which duplicate copies are kept at College A . Section 7.

At this College frequency of use of main and school services books was investigated by means of a 1:30 stock check and a random sample of issue slips returned during a 12 week period. Section 8.

Percentages of stock represented by each Dewey class were also ascertained. Section 9.

38% of main library and 28% of school services books were not used in two years. Section 8.

Literature and Philosophy and psychology had higher proportionate use; Section 9, Language, Technology and Local studies had low proportionate use, compared with the proportion of stock they occupy. Table 3.

A breakdown of a year's issue statistics showed that demand peaks heavily just before teaching practice. Table 6. 10% of use occurring in 6% of the term year at College A and 17% in 9% of the term year at College E. Section 11. This use would absorb nearly all available staff time during the weeks concerned. Section 11.

The stock and issue checks at College A showed that most school services use was for primary school materials. 33% of total issues are for the school services library. Section 12.

College A's reservation system was studied. The delay in obtaining materials discouraged use. Section 13. A "last date still useful" column on reservation forms would streamline procedures. Section 13. Most reservations at Colleges A and C were for Education materials. Sociology, Arts and Physical Education represented 10% at College C and Literature 15% at College A. Table 8.

The students most common course of action in three colleges, on failing to find material was to "come back later", but it was "make a reservation" at College B, where the reservation system was most heavily used. Table 9.

Slip failure surveys, based on LMRU's methods, were carried out in three colleges, and questionnaire failure surveys in four. Section 14. The most common reason for failure was "books out on loan".

16% - 19% of failure was due to readers' difficulties in using the library and 10% - 25% was due to items not being in stock. Table 9.

Rates of library use, Table 11, length of visits and the times at which these occur, Table 12, are shown graphically. Section 17.

Failures in subject searches, Section 19, and in using the catalogue, Section 21, were analysed and the effects of failure are discussed. Section 23.

About half of the readers failing claimed it would only have a slight delaying effect on their work. Table 14.

25 order cards were marked at selection stage in the eight sample colleges to see how long books took to reach the shelf. Section 24. In no case did all 25 complete the process in 18 months. Those which did took averages of from 9-47 weeks to do so. Section 24.

Interloans are discussed and analysed, Section 25, and there are notes on periodical use, Section 26, and illustrations of the growth of library business in several of the colleges. Tables 15-24. Recommendations for future research are made. Section 19.

PART III A

APPROPRIATE LEVEL OF ANNUAL BOOKFUND FOR A COLLEGE OF EDUCATION LIBRARY.

Existing standards of annual bookgrants are reviewed and their inadequacies examined. Section 2.

Standards for funding were sought based on what a college library should buy in one year. Section 3.

Academic staff normally responsible for selection at College A were interviewed and selected titles in their own subject fields from 1969 annual volume of BNB. Proportions of total funds for B.Ed., Certificate, Education, School Services, etc., proportions and costs of duplication and unit costs for each department were calculated. Section 4. There is some evidence of similar results from smaller investigations at three other colleges. Section 5.

Analysis of book orders at College A for 1969 showed that 39% were for current BNB items, 7% for current foreign items and 54% for retrospective items. Further analysis established that 4.5% of BNB items were two years old at the time of purchase, 12.5% were one year old, and 83% were current. Section 6.

The pattern of expenditure over three years is shown diagrammatically, Table 2.

The overall unit cost of £1.67 calculated from the book selection investigated at College A is compared to average unit costs for 1971-2 purchases by the eight colleges. Section 9.

Three years' expenditure on periodicals, binding, audiovisual materials are analysed thus providing a total library materials grant. Sections 11-13.

Main categories of need which the library budget should cover are listed: Section 16.

A. Certificate courses
B. B. Ed. courses
C. Education, Professional and Curriculum courses
D. General Background
E. Subsidiary subjects.
F. Special courses
G. School Services book materials
H. Periodicals
I. Binding
M. Audiovisual materials
N. Interloans

Weightings are given by means of a points allocation to the various elements of student members; levels of study; breadth and depth of courses; numbers of options within them; "bookishness" of subjects and above average unit cost subjects. Section 17 and Table 4.

Percentage reductions for access to goodlocal library facilities are made. Section 18 and Table 5.

The total library budget for College A is calculated and divided by the total number of points, thus providing a value of £21.01 for each point. A percentage increase is made to cover the rise in the cost of books and a final point value of £22. is established. Section 19.

The formula is then applied to the seven other colleges, Section 20 and the results are compared with th ATCDE/LA and DES standards, Section 21 and Table 8.

A simplified version of the formula is outlined. Section 20 and Appendix III A 4. Its use for allocating bookfunds within the college is shown by reference to College A.

Ways of updating and adapting the formula in future are discussed. Section 24.

PART III B

METHODS OF BOOK SELECTION

Several books and articles on book selection are discussed. Section 3.

The problems in colleges of education were - cooperation levels between librarian and lecturers; Section 4.1, levels of subject specialisation within the library, Section 4.2; means of establishing the success of book selection, Section 4.3; shortage of time and student participation, Section 4.5.

A questionnaire was sent to the eight librarians to investigate the selection methods which they used. Section 5. The results are shown in tabular form. Table 1 . Library agents in each department are usually used for liaison with the library. At College E the librarians do much of the selection.Elsewhere more complete contact exists with some departments than others. Section 6.

Library staff in most places are involved in some selection in areas such as bibliography and childrens' books. Section 8.

Bibliographic searching suffered because of lack of time and on-approval services often used. Section 9.

A need for closer cooperation in editing students' book lists was found. Section 10.

The role of the librarian in selecting multi-media resources as well as books is also discussed. Section 10.

PART IV

STAFFING REQUIREMENTS OF GENERAL COLLEGES OF EDUCATION

The present standards of staffing are reviewed. Section 1 and Table 1. Measures of the work load at college of education libraries were sought, mainly by full scale studies. Sections 1-2. 12-13 week time studies of all library activities took place in four libraries. Section 3.

A self-recording system was used , Section 4, and a fair degree of accuracy is thought to have been achieved, in spite of the pressures on staff caused by this method, Section 5. In all cases time recorded as worked was within 12½%, i.e. the relaxation allowance limits, of time available, Section 5, and some timing experiments for parts of circulation, shelving and straightening and activity sampling for circulation took place. Sections 53 & 54.

Analysis was made by job and by type of staff. Library work was divided into 13 main tasks, i.e.,

Book Acquisition
A.V. Acquisition
Periodical Acquisition
Stock Maintenance
Circulation
Internal Use
Photocopying
Interloans
Readers' Advice
Reservations
Administration
Teaching Guidance and Display
CELRP Research

Appendix IV, Table 1.

The most time consuming jobs for the whole staff were Circulation and Book Acquisition, except at one college where it was Administration. This library had a large backlog of unprocessed acquisitions. Section 6.

Administration was the academic librarians' most time consuming job. Circulation, Acquisitions, Teaching, guidance and display also being important. Section 8.

Book Acquisitions and Circulation were time consuming for professionals and, in some libraries, so were Readers' Advice and Administration. Section 9.

Much of the clerical staffs' time was absorbed by Circulation, but in some cases, fairly large proportions went on both Book and Audiovisual Acquisition. Section 10.

In all cases there was considerable variation from library to library. Section 12.

Time spent on each part of Book acquisition, Section 14; Audiovisual acquisition, Section 15; Circulation, Section 18; Administration, Section 17; Teaching, guidance and display, Section 18; and Internal use, Section 19; was further analysed. Classification and cataloguing was the most time consuming part of Acquisition for professional/academic staff in most cases. Section 14.

Usually about a quarter of internal use time went on straightening and the rest on shelving, though in one college 90% went on straightening. Section 19.

Each task was analysed according to the type of staff performing it. Sections 20 - 34. The parts of Acquisition tasks Section 21 and 23 and Teaching, guidance and display, Section 32, were also analysed in this way.

Each task was described in detail and, where possible, unit times were obtained for all tasks and parts of tasks where units of work output could be obtained. Sections 35/58. Book acquisition unit times varied from 19.52 - 37 minutes. Section 35. Audiovisual acquisitions from 3.45 - 29.96 minutes, Section 51, and Circulation from 2.06 - 4.9 minutes, Section 53.

Unit times for parts of book, Sections 26 - 42), and audiovisual acquisition, Sections 47 - 50; Circulation, Section 53; and Internal use, Section 54, are shown. Book acquisition times are compared with those obtained in Universities, Section 43.

Workloads per person were calculated for these activities at the eight colleges and an attempt made to use these as productivity gauges. Table 5. They gave total workloads per person, weighted according to how time consuming the jobs were estimated to be. These loads varied from 26,428 to 70,481 units, but did not take account of differences in working methods nor include several tasks for which no unit was available, such as teaching and administration. Section 64.

The time study figures were extrapolated for the whole year. Sections 59-63. This showed what backlogs would remain when all available time had been used. These were mainly in Book acquisitions, straightening and Teaching, guidance and display.

Future staffing needs are discussed, Section 65, and time needed for each activity calculated for College A, Section 67, according to the librarian's estimates of future work. Table 18.5, Appendix IV.

Considerable variation exists amongst colleges, between types of staff used on different activities, but a fair measure of agreement about who should do what can be obtained. Section 66. A compromise list of tasks for each grade is offered. Table 17, Appendix IV. Areas where doubt remains include straightening, circulation, audiovisual cataloguing and display.

Finally, eight formulae were calculated to provide staffing according to the libraries' actual workloads and to allow flexibility for future needs. Sections 68-78.

Varying rates are applied according to individual college situations, to library statistics of acquisitions, Section 70; issues, Section 71; stock, Section 72; user population, Section 75; bibliographies, Section 75; and displays produced, Section 70; committees, Sections 76; and administrative needs, Section 77. These formulae have been applied to the statistics for 1971/2 from 14 other college libraries as well as the four where time studies occurred, Section 78.

Appendix tables show where total time went during the time study, Table 5, and proportions of time for all types of staff, Table 6, and activity, Table 7. Also included are details concerning backlogs and future needs at several colleges, Table 16; bibliography and display programmes at College E, Table 15.1; and the calculations on which formulae 1 - 3 are based, Table 19.

PART V A

LIBRARY USE BY STAFF AND STUDENTS AT COLLEGES OF EDUCATION

Surveys were carried out in nineteen colleges to investigate the use made by students and staff of their own college and other libraries. Diaries for recording each day's use of the college library and questionnaires for recording use made of all types of other libraries during the same week were distributed. Samples taken of students varied from 15% to 50%* and response rates ranged from 43% to 79% with an average of 67%. Table 1a.

In 16 of the nineteen colleges all the academic staff were asked to take part. Table 1. Response rates ranged from 24% to 88% (average 49%). Table 1a.

Inaccuracy in relation to the issue statistics varied from 2% to 86% (average 31%), Appendix V A, Table 3, but the proportionate results are believed to be unaffected, Table 4.

Background information for each college and other libraries used and maps of the area are included. Tables 1b - 1d.

Students made heaviest use of their own college libraries for reference purposes, Section 7; but heavy use of other libraries for borrowing, Sections 7 & 8; on average about one third of the total borrowing occurred in public libraries, Table 2b.

Use was increased by geographical situation only when very good facilities existed within a short walk or brief direct bus route. Table 1c and maps 1d.

Some university and institute of education libraries received heavy use from staff and fourth year students. Table 2c, Section 8.1. The two factors most likely to limit the use of other libraries were distance, especially in relation to travel costs, and the availability of facilities to users from colleges. Section 8.2, Table 4.

Internal:external use ratios by students for college library books varied from 4:1 to 3:4. Table 5. Borrowing use was heavier in other libraries, ratios ranged from 2:1 to 1:3. Table 5. Staff made less use of other libraries for reference and study purposes. Table 5.1. Use ratios for the college library ranged from 3:1 to 1:1 and for other libraries from 4:3 to 1:4. Section 9.

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* This sample did not include the year group on teaching practice at the time.

Vacation use by students was mainly of public libraries. Other college libraries were hardly ever used. Staff made heavy use of university and institute libraries during the vacation. Section 10.

Returns from students on teaching practice in some colleges were analysed separately. Appendix IV, Table 2.2. They made little use of college libraries but, in some cases, very heavy use of public libraries. Appendix IV, Table 5.2. However, they were much more likely to make nil returns than other students and had very low internal:external use ratios. Table 5. The variation in patterns of use by students from the different colleges was often considerable. The main factors influencing this were the type of library, the type of college and the type of student. Section 12. Where most library use is concerned, within each college all the students apparently form a single homogeneous group. Section 13. The most common exceptions were the fourth years who were likely to make heavier use than others. Table 8.

Patterns of book use and length of visits have been shown by means of probability models for all homogeneous groups which could be found. If y is taken to indicate one book, then internal use varied from y = .91 to y = .67. External use varied from y = .82 to y = .6. Table 8a. If y is taken to indicate a visit of 15 minutes length, the range was from y = .9 to y = .64. Table 8. Graphic illustrations of the techniques are included. Table 8.1, Appendix 4.

The Appendix includes percentage breakdowns of all types of use for each category of user, Tables 2 and 5; detailed notes on reasons for non-use, Section 4; average use, Table 7; and accuracy levels, Table 3; and statistical data on probability models, Table 8.1, Section 8a.

PART V B

STUDENTS' BOOK BUYING HABITS

Considerable interest has recently been shown in how much students spend on books. They are believed to spend less than that part of their grant which is earmarked for books and equipment. Section 1.

Three exploratory surveys were carried out, the first of College A's staff and students in Spring 1971, the others of College G and College 3 in Summer 1972. Students were asked how much they spent on books and equipment and in which subject areas, and how useful they found their book lists. Staff were asked what they thought students ought to spend, what information they put on book lists and how book buying could be encouraged. Section 2.

Students surveyed spent on average £14 at College A and £30 at the other colleges, but the samples and response rates were very small. These figures included equipment. Students at College 3 bought a lot of books from their lists, those at College G only bought a small proportion from these, and were very critical of them. Section 3.

The figure recommended by staff of £27 for 1st year Education spending exceeded the actual expenditure of the students, but main subject staff gave much lower figures. Many staff did not check the bibliographic details on their lists. Section 4. Some useful recommendations to encourage student buying were made by both staff and students. Sections 3 & 4.

College bookshop managers were also interviewed and estimates of student spending on various subjects at College C are included. Section 5.

PART I AIMS AND OBJECTIVES OF COLLEGE OF EDUCATION LIBRARIES

INTRODUCTION

1. The first objective of the research project was to establish the aims and objectives of college libraries, so that there would be a positive yardstick against which to measure the results of the remaining research investigations. The first draft of this statement was based on the existing literature on the subject and the past experience of the project director in his own library and in discussions with other college librarians on the Library Association's national committees and the local board of studies for libraries over the past ten years. This was circulated to the lecturing staff and the students of college A and was discussed in detail when research staff first visited the other seven cooperating libraries. It was also available to librarians attending the Easter CISE conference in 1971. In the light of all the comments received, a revised draft was written and circulated for comment to the other seven co-operating librarians. Then followed a period of a year during which visits, discussions and investigations connected with the other areas of research absorbed most of our time. A third and final draft was circulated to the co-operating librarians and the Steering Committee before a short conference of the research team and the librarians in September 1972 and agreement was reached.

The statement is a forward looking, reasoned statement of why colleges of education need libraries at all, and, in view of the overall aims of the college, what sort of services they should give. No explicit mention is made of resource centres since our terms of reference were concerned with the traditional college of education library. Yet many libraries are expanding their non-book materials and services in this direction, some more rapidly than others, so that it would be inappropriate for us to set any boundaries to the future nature and development of libraries as fully fledged resource centres. Hence the idea of a resource centre is implicitly included wherever it is relevant. Resource centres have been the subject of a separate research project carried out recently by NCET.

AIMS

2. The aims and purpose of a college of education library should closely reflect those of the institution which it serves. The college offers its students the opportunity to continue their own education and prepare them for the profession of teaching children and young people, the greater part of whose life span will fall in the twenty-first century. It should also be in the vanguard of developments in the field of education.

3. As at present constituted, the colleges prepare young school leavers and some mature entrants for the Certificate of Education, and the Bachelor of Education degree, by courses lasting three and four years respectively and graduate students for the Postgraduate Certificate in Education by a one year course. A few colleges offer a specialist training in Physical Education or Home Economics, and others offer a variety of shorter in-service courses, such as the teaching of immigrant children, the teaching of the severely sub-normal, and careers guidance.

4. As a result of increasing dissatisfaction with their present position in the field of higher education and of recent government enquiries and proposals, many colleges are already re-assessing and re-defining their aims and purposes. English education has been accused of " a lack of clear objectives, and a blithe disregard of the effectiveness of the service it provides." *

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* W. Kenneth Richmond. The teacher, his work and training. Aspects of Education, 9 Education for the Seventies, p. 58

Whether such a charge is justified or not, there would seem to be an urgent need for libraries in colleges of education to consider what their role is. It is the intention of the present statement to emphasize those aspects of education which, it is now generally acknowledged, will become increasingly important in the future, and in which the library has a positive role to play.

5. Among the many needs at present discernible in education is that of preparing young people to live in an age of rapid technological progress and social change. College courses have traditionally provided the student with a body of factual knowledge about academic subjects and the theory of education and initiated him into the skills of teaching curriculum subjects to children of different age levels, abilities and special needs. It is no longer certain that all of what is learnt at college will apply in future years. The way such knowledge and skills are learnt should itself enable the student to develop, change and to adapt himself to new knowledge, to changes in educational theory, methods and techniques, and to use new kinds of resources for learning and teaching. Passive acquiescence in a teaching process in which the lecturer's authority is dependent on his superior knowledge, is not likely to foster in the student, awareness of the need to change and adapt. These developments of thought on education are summarised in the James report, section 4.16 in connection with possible diploma courses:

> "The methods of teaching are themselves of vital importance. Since the underlying aim is to stimulate thought and interest, discussion is better than lecturing. It is in seminar or tutorial groups that individuals recognise the value of interests outside their special studies, and it is in such groups that some aspects of those books and other works that form the great tradition of culture can be discussed. Another important feature of the diploma course should be the provision of ample opportunities for individual work. Although much of the criticism of the work in the colleges is exaggerated or misconceived, there is no lack of evidence that students, even if not overworked, are over-taught. This state of affairs arises in some cases from the desire to achieve inappropriate standards, often simply of factual information."

6. Those colleges which are moving away from traditional lecture-based and examination-assessed courses, to special studies, formal assignments and continuous assessment show that they recognise the need to encourage students to take greater responsibility for their own learning. This shift in emphasis from lecturer-controlled learning to independent learning implies a willingness and ability on the part of the student to discover and search all kinds of resources, both print and non-print, to read widely on a particular topic or subject, to choose wisely options and subjects for special studies, and to organise his notes and other study materials economically and systematically.

OBJECTIVES

7. The library's role is to realise these aims by the pursuit of the following objectives:

.1 to provide appropriate materials for students and staff at all levels of their work,

.2 to provide the best possible access to these materials and to external sources of information of all kinds,

.3 to foster an awareness of the value of all types of learning resources and encourage an interest in and an appreciation of their use by students in their own studies and later, in their work of teaching.

8. In examining in detail those activities by which the library achieves its objectives, a logical order is abandoned in favour of an order of importance and complexity.

THE THIRD OBJECTIVE

9. In the library of any academic institution it is necessary to provide a certain amount of education in library use. All students should be able to use the library's catalogue, to understand the classification system used and find their way confidently around the core literature of their subject field. Beyond this students are encouraged to make use of the expertise of the library staff. In a college of education the situation is slightly different. Most of the students will become teachers who, on the one hand, will often have limited access to bibliographic guidance by a librarian, and yet on the other hand need to be able to pass on to their pupils an interest in using and an ability to use learning resources.

10. The librarian, therefore, in collaboration with his teaching colleagues, should promote the library education of the student so that he acquires a knowledge and understanding of the wide range of resources available, and becomes practised in their use. Such education may be effected through courses given by library staff and by means of integrated courses.

11. The following are examples of the kinds of teaching and courses at present being provided in some colleges.

.1 Explanation of the basic mechanics of using the college's own library.

.2 Courses on the organisation of knowledge and methods of enquiry.

.3 Courses on methods of study at the level of a) practical information and guidance on how to organise student's own work, b) introduction to bibliography of their subject, including journals, indexes, abstracts, etc.

.4 Courses on learning resources, covering the techniques of searching and using for their own personal use,printed materials pictures, diagrams, maps, charts; microforms, slides, films, film strips and loops; records, tapes and video tapes; radio and television programmes; multimedia kits, programmed materials, models and specimens.

.5 Courses on libraries and resource centres in schools (see previous section).

.6 Courses on children's books.

.7 Tutorial work for advanced students and for teaching staff.

.8 Bibliographic enquiry service.

THE SECOND OBJECTIVE

12. The library should publicise its resources and services and promote their exploitation by all members of the academic community:

.1 by making library staff visible at all times that the library is open,

.2 by a programme of library and subject guides, periodical indexes, bibliographies, accessions lists, current contents lists,

.3 by the provision of Current Awareness and Selective Dissemination of Information (SDI) services,

.4 by means of clear guidance to the user within the library by the provision of notices, signs, colour coding and other methods, and also within the college as a whole,

.5 by stimulating displays of materials both within the library and where possible in other central situations within the college.

13. The use of all materials should be made as easy as possible by:

.1 full classification, annotated cataloguing and detailed subject indexing of the whole collection,

.2 open access to materials of all types, in as few separate sequences as possible. A fully integrated stock, regardless of type of material, or type of use should be considered,

.3 the provision of sufficient space for long and short term study within the library,

.4 variable loan periods depending on the intensity of demand on any particular part of the stock, the successful operation of which will depend on close cooperation with tutorial staff,

.5 the use of issue, discharging and renewal systems requiring the minimum amount of delay to the reader and allowing for the most economic use of staff time and for immediate access to the records of any particular item on loan. The same system should be flexible enough for use during school practice periods,

.6 an efficient and well-advertised system of reserving items not immediately available,

.7 providing for the photocopying of library materials for purposes of private study and within the scope of the Copyright Act,

.8 keeping the library open and staffed for all those hours including evenings and weekends, when students or tutors are likely to require access,

.9 methods of organisation and control which encourage responsible use of library resources.

14. The library should act as a link between its users and external sources of information and materials by:

.1 offering a well advertised interlibrary loans service, using all the relevant agencies,

.2 maintaining good personal relations with local libraries,

.3 the provision, where possible, of copies of catalogues of other libraries likely to be of use,

.4 the provision of bibliographies, indexes, abstracts and publishers and booksellers catalogues,

.5 maintaining links with local bookshops and book and other media promotion agencies, such as the National Book League, the School Library Association, the Educational Foundation for Audiovisual Aids and the National Council for Educational Technology, and displaying their materials and travelling exhibitions,

.6 the provision of directories of all kinds, and guides to other libraries and other media agencies, and to other information and advice agencies.

THE FIRST OBJECTIVE

15. In close cooperation with academic staff and students, the library staff should select and acquire materials of all types by whatever means are appropriate to support the students' study of:

.1 their academic subjects to Certificate and B.Ed. General or Honours degree levels,

.2 Education, Professional and curriculum subjects to Certificate, Graduate, Postgraduate and research levels,

.3 Children's literature, both imaginative and factual, and the wide range of other learning resources used in schools.

16. The college library should also aim to provide some materials for the students' general background and cultural activities, taking into account alternative sources of these in the area.

17. It should provide materials to support the teaching interests of the academic staff and, having regard for facilities available in other local libraries, the appropriate research work they may be undertaking in connection with their teaching.

18. The selection of materials for all purposes should include retrospective as well as current materials. There should be a duplication policy suitable to the character of the college and its type of courses. The collection should be properly maintained by constant stock revision.

CONDITIONS

19. There are four pre-conditions for the achievement of these aims and objectives.

.1 In order to participate in the planning and development of college policies, courses and other activities, the library should be actively involved in all developments for which it provides resources. The Librarian should be a full member of the academic staff, an ex-officio member of the academic board, and a member of other policy making or course planning bodies within the college, among which there should normally be a committee to deal with matters concerning the library.

.2 There should be a sufficient number of experienced, professionally and educationally qualified staff to enable the library to fulfill its educational role, and its function as an information centre. Their work should be supported by the satisfactory provision of clerical, technical and manual assistance. There should be adequate time and opportunity for in-service training and continuing education for all levels of staff and for sabbatical leave for senior staff.

.3 There should be satisfactory financial provision for the acquisition of all types of resources and the equipment necessary for their use.

.4 The librarian should be involved at all stages in the planning of new library buildings or extensions. Ideally, the library services should be contained in one centrally sited purpose built building and closely associated with the college's technical services and with areas devoted to curriculum studies and educational technology, so that all concerned can work in close collaboration. There should be:

(a) appropriate storage and display accommodation for main lending and reference material collections; short loan collections; children's material collections and current and retrospective periodical issues,

(b) provision, according to the size of the college, of study space and suitable furnishings for long term study, using the library's materials or the user's own materials and short term reference or study space,

(c) viewing, listening and reprographic facilities, and appropriate teaching or workshop space for practical group work with materials of all kinds,

(d) noisy areas, such as the issue desk and areas where conversation is allowed, separate from the browsing and quiet study areas,

(e) adequate functional workroom space in which new materials can be prepared for use,

(f) sufficient private office space for senior library staff.

References

Richmond W.K. — The Teacher, his work and training. in *Aspects of Education. 9 Education for the Seventies*. Ed. F.W. Garforth, University of Hull Institute of Education 1969.

Department of Education & Science. — Teacher Education and Training: A report by a committee of Inquiry appointed by the Secretary of State for Education and Science, under the Chairmanship of Lord James of Rusholme. HMSO 1972. (James Report).

PART II   EFFECTIVE USE OF LIBRARY MATERIALS

1. Introduction

The effective use of libraries depends on a wide number of factors, some of them directly controlled by the management decisions of the librarian, others equally affected by the readers' patterns of use. We have investigated those parts of the daily running of the library over which the librarian has some control and concerning matters where choices need to be made. These include loan policies, reservations and interloan systems and opening hours. They affect availability of materials in relation to peaks of demand on particular parts of stock and at certain times of the day and year. The formulation of successful policies will enable the librarian to fulfil the library's aims in so far as they are outlined in Section 12 of our Second Objective (See Part I), i.e. to make all materials as accessible as possible. These should allow the greatest number of people to enjoy the greatest use, given the compromises necessary to produce a realistically efficient system within reasonable economic bounds. The topics we investigated are particularly relevant to Sections 12.1 to 12.6, and also to Section 13.1, i.e. to provide external links via an interloan system.

Effective use and the achievement of the libraries' aims depends in part also on the readers' ability to use the system. Investigations into reader failure, that is his inadequacies in finding what he seeks are, therefore, relevant to the Third Objective, especially Section 10.1, i.e. explaining the use of the library and Section 10.4, i.e. providing courses on searching techniques.

In this part we concentrate on investigating how successful the librarian is in enabling the materials which he has in stock, on order, or can obtain from elsewhere, to be available to as many of his readers as possible when they need them.

Implicit assumptions are made concerning the First Objective, i.e. the provision of materials needed, our pre-conditions, and part of the Second Objective, i.e. the promotion of library exploitation.

CIRCULATION

2. Variable loan periods and availability

The most usual way of measuring the use of a library is by reference to its issue figures. This is a perfectly reasonable guide to the amount of use the stock is receiving, the amount of reading its users do and the extent to which the library is able to provide them with their needs. A very large number of libraries do keep regular records of issues made and, with most issue systems this is an easy statistic to keep over a long period of time. The size of the issue will, of course, vary according to the number of people having access to the library. Within a college there is a fairly easily definable number of people falling into this category and it is, therefore, possible to calculate for each college how many books were borrowed per head in any particular period of time. Six of the eight sample colleges keep issue statistics and the numbers of books borrowed per head at these during the year 1971-2 were as follows:-

	Based on issue statistics for one year						Based on issue statistics for three weeks	
	A	D*	E	F	G	H	B	C
Staff	54	86	-	-	-	-	20	-
Students	59	64	-	-	-	-	19	-
All	56	66	62	71	50	38	19	46

* Staff student differentials are estimated on one week's figures.
(For similar figures for some other colleges see Part V A, Section 15).

Other factors affect this level of borrowing, however, the most controllable being the length of the loan period. If this is very long there is a tendency for people to keep books out after they have finished with them, thus depriving others of their use and depressing the loan figures. Most libraries with long loan periods endeavour to mitigate this effect by allowing a very limited number of books out at any one time, thus enforcing the return of items before more can be borrowed. Some issue systems which do not rely on the leaving of a borrower's ticket every time a book is taken out, make this system unworkable in practice, however. Long loan periods cut down staff work on overdues and renewals but if, as is often the case, all books are due for return en bloc at the beginning and or end of terms a peaking of library work at these times will result (see Section 11 for other causes of peaking of demand on the library). On the other hand, if the borrowing period is very short, there will either be a large number of renewals, thus inflating the issue statistics or a constant need to chase overdue books. Each of these causes increased pressure on library staff, and overdue notices can cause a certain amount of ill feeling amongst users, especially where a fines system is in operation. Yet without such a system overdue notices may well be ignored. Fines have been found necessary for the successful running of short loan systems.

However long the loan period is, books on loan are often likely to be sought by other readers. One solution to this is for the librarian to work a system of recall, perhaps instead of sending overdues. This means that, after a book has been out a stated length of time a recall notice would be sent to the borrower only if a reservation is received for that item. This method cannot be conveniently worked in a library such as that at College A where the issue is filed in transaction number order and, therefore, books cannot be conveniently stopped in the issue or the holder traced. It also does not solve the problem of much needed books being out of circulation to one reader for a long period of time because only a small number of those seeking an item actually put in a reservation for it (see Section 13), and obviously nobody browsing or doing a subject search can have his problems solved for him this way. (see Section 19).

3. Varying loan periods - according to user.

Part of this problem results from the fact that, while some books are in heavy demand for a relatively small section of their contents, others are needed by certain individuals for study over a much longer period. Some libraries have tried to differentiate according to the type of user and allow longer loan periods for staff than they do for students, for example :-

College	A	G
Staff	12	no special conditions
Students	3	2 weeks

How far this is a valid distinction is dubious, however. The result can be that a member of staff borrows the book and then themselves issue it to each member of their group of students in turn, thus usurping the libraries function and depriving other students in college of the use of the material in question. It is unlikely that, in most cases, the book is in use throughout these long periods, and is more likely to sit forgotten on the lecturer's own shelves. At College A a survey showed that most use of books borrowed by staff occurred during the first four weeks of the loan period. In addition, it was found that a disproportionate amount offailure by library users to find books was due to their being on loan to the lecturing staff. Of all items which caused failure because they were on loan one in six were on loan to staff. Yet the ratio of staff to students' issues over that year was only one in fifteen. (For other causes of failure see Sections 14 and 16 on the Failure Survey, and Appendix II, Tables 4 to 4.4 for details on methodology and results). For this reason the staff loan period has now been reduced to four weeks at College A. One loan period applicable to all users would eliminate a separate sequence of issue slips at the counter and thus save staff time, (for an investigation of the effect of this change on renewals and overdues see Section 5).

If it is felt that lecturing staff should be allowed a privileged level of access to library materials this is probably more simply and reasonably achieved by allowing them to borrow more items at any one time, perhaps, as at Colleges C, E and H, allowing unlimited borrowing. Longer borrowing periods can also be considered as a way of providing the extra access often needed by fourth year B.Ed students as at Colleges C and F, (see Section 17 of Table 1 Background Information).

4. Varying loan periods according to type of material and purpose of user

Many college libraries have a restricted loan collection for some of their books. The basic rationale behind this is to allow more students to use a number of books which are, either permanently or temporarily in heavy demand. These are items, which are also often borrowed illicitly and thus greater control over their use is also warranted. The items in a restricted loan collection will usually include a small number of books always in heavy demand and a larger number of floating titles, which are books needed for a particular piece of work by a large number of students at one time. For this system to work, a high level of cooperation between library and lecturing staff and frequent monitoring of the use of the collection is required. It is also necessary that students be made aware of the collection. Items permanently in the collection can be so described in the catalogue, but for the rest usually a loose leaf separate catalogue is all that there is time for. College A keeps such a list for reference use at the counter. Another college library provides regular cyclostyled lists for students to take away with them. It is particularly likely that students not doing the course for which the book was placed in the collection, but needing it, will be unaware that the collection is worth checking. This is especially the case since, although some lecturers make heavy use of this kind of service, others never use it. The librarian at College T has particularly commented on the lateness with which information from staff concerning books to be placed on restricted loan reaches her; often after the students have been told to read the book and, therefore, after the first student has already borrowed it on long loan. It then becomes necessary to attempt to recall the book before others can use it. The amount of use the collection receives is probably also affected by where it is housed. For example, at College A it is in two lockable glass fronted cupboards near the issue counter in a busy and rather dim passageway. At College E the collection is partially out of sight in the office, and is for reference use only. At College C it is behind the issue counter on open shelves. A well run collection can greatly improve the availability of materials in this special area of need as the following evidence shows. At College A during the period 22nd January - 19th March, 1971, 13 readers borrowed the eight copies of a title on the open shelves, but 21 readers used the three copies of the same title in the R.L. collection. The proportions of total issue deriving from issue of items in R.L. compared with the size of that collection in relation to total lending stock at two colleges, was as follows for the year 1971-2.

	A	E
% of total issues due to R.L.	2.1	6
% of total lending stock in R.L. at any one time	.7	1.7

However, even with such a small controlled collection, it is still very difficult to be sure that not only the right books are going into the collection, but that they are also being removed as soon as necessary. If a book which is not in heavy demand is kept off the open shelves and cannot therefore be found by browsers, there is a possibility that it may receive even less use than it might otherwise have done. At College A a survey of all books in the R.L. collection at one point in time showed the following number of issues of each title that year.

Multiple Copies - No.of Times Title was Issued

0	1	2	3	4-8	More than 8
25%	14%	12%	8%	25%	16%

Total 47 titles

Single Copies - No.of Times Title was Issued

33%	28%	13%	7%	24%	5%

Total 206 titles

In comparison about 40% of main library books were not issued in one year (see Section 8). At one university offering a short loan service the percentage of items unused was 26% and of those used 1 - 4 times, 32%, but 9% were used more than 15 times. In comparison 6% of multiple copies and only 1% of single copies were used this often at College A. The conclusion at this university* was that as "the preparation of books for short loan will cost in salaries alone about £1,000 this session, on the available evidence of use, much of this work appeared to be misdirected effort and serves only to distract the library's attention from providing in sufficient quantity titles that really are in demand". Nevertheless, careful control of the collection at this University has brought the percentage unused down to 11%.

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* private communication.

Further experience in running this collection has proved that it is far too expensive in staff time and even so formation of queues of readers could not be avoided. Now a student reference collection has been instituted. Here, multiple copies are made available on a self-service basis and read in a special enclosed area. The short loan collection still exists, but is much reduced in size and can be looked after by a single member of staff.

The subjects for which the restricted loan collection were most popular at College A were Education and English Literature (about 25% of the total each) closely followed by Language materials (19%). These figures are based on samples of issue slips for books borrowed during a 12 week period (See Section 9). At the University the top four were History, Sociology, Philosophy, and English (Sociology and Philosophy were probably fourth at College A, but the evidence is too slight to state this with any certainty.) For more detailed and very useful study of the problems and advantages of a short loan collection the article "The Short Loan Collection in a University Library by P.G. Peacock in Journal of Librarianship Vol.4 No.2 April, 1972 is recommended.

5. Variable loan systems

The solution may lie in a more complex and advanced variable loan system which takes into account both the demand on particular titles and the nature of the material. A loan period of only a few hours is obviously unsuitable for a book which is required for careful and detailed study, however many people may be wanting it. On the other hand, even though a book may not be required by a whole group, it is unreasonable that it should be off the shelves when the borrower has finished with it, since a browser may have found it useful, (see collection bias, Section 5). If books continue to be in heavy demand for long periods the solution must lie either in duplication or student purchase. Another answer, however, may lie in change in teaching methods to those which do not require large groups of students to read the same chapter of the same book at the same time. Meanwhile, it would be helpful if a successful way of of assessing appropriate loan periods for particular groups of books could be found. If this were possible, loan periods of one or two weeks, a month or a term and perhaps also very short periods of several hours or overnight could be instigated for different types of book, without necessarily removing them into a closed access situation. Yet this latter course may be more useful for the small number of books requiring close supervision against theft.

The peak demands can best be met by a short loan system as has been demonstrated at Lancaster, and in some of the case studies in the failure survey at College A, (See Section 7). Provided lecturers cooperate by notifying titles in time for expected peak demand, a 48 hour restricted loan collection can help to secure the best use of books in stock, and allow transfer back to the main stock for the rest of the year. In the college situation with its full lecture programme, a loan period of less than 48 hours is impracticable. Experience at Lancaster has shown how valuable is the introduction of a class of books available for loan for one week only. Total issues before the variable loan policy was introduced were 63,000 and two years later had risen to 167,000. This increase was not pushed up by a very large increase in renewals. The user population had only increased by about 50%. At College A staff renewals were approximately 18% while a twelve week issue period was in operation and rose to 28% immediately after the period was reduced to four weeks. These figures are calculated on a small sample and at least are probably only accurate within + 5%, therefore the real difference between the two percentages is very slight. The proportion of overdues was more seriously affected, rising from 6% to 83% immediately after the change. However, as people become accustomed to the system it dropped to 27%. Student overdues are about 31%. It might be feasible to introduce a category of books still shelved alongside the other books which were available for one week only, and which were kept in circulation by a fines system and prompt follow-up of overdues, which have been shown to be essential from the experiment at Lancaster.

According to the survey at College A (see Section 13) 40% of users expressed a preference for a one week loan period for certain items which in demand. (For details of other preferences see Table 2 in Appendix II). It is hoped to introduce a one week loan period for the approximately 10% of books in the main lending stock, which circulate more than four times a year, as well as retaining the 48 hour loan collection for the 1% of books very intensively used. Books would be automatically put in this collection at an annual review in the summer vacation if they had been out more than four times in the previous year, and those already in the one week loan collection, which had not earned a place by a circulation record of four or more issues would be returned to the main collection. At the same time, the loan period of staff and students alike for the main lending collection would be stabilised at four weeks, thus removing all distinction between staff and student, and making frequency of use the sole criterion for loan period. If the four week loan period for all users were introduced without the introduction of a one week loan category, according to the Lancaster program, category A (the most used books, $4\frac{1}{2}$ + issues per annum) would only achieve a 90% satisfaction rate instead of the 97% achieved when four week loans for staff and three week loans for students are in operation.

The research team at Lancaster University, who have given us considerable help, applied the computer program used for an investigation into the effects of variable loan policies to data supplied by College A. This program produces an overall average satisfaction level for term time, being expressed as the percentage of readers' demands likely to be met immediately from a loan copy, assuming that users are 100% able to find a copy if it is in the library. Satisfaction level in all other categories was 90% or higher. If a one week loan period were introduced, levels of duplication could be reduced still further, while retaining a high satisfaction level.

At College A an investigation was carried out into how long books are kept out on loan. All the issue slips from returned books were stored over a period of twelve weeks and then sampled. Three samples of 500 slips each were taken. Some of the books had been issued for teaching practice purposes and allowed out, therefore, for the duration of the teaching practice. These were excluded, the rest were analysed according to date returned and the results were as follows:-

SAMPLES	1 100 (344)	2 100 (346)	3 100 (353)
Returned within 1-6 days of issue date	4	7	6
By end of 2nd week	14	12	14
First 5 days of 3rd week	19	16	14
2 or 1 days before due	9	10	11
On date due	23	25	19
Total	69	70	64
Returned 1 or 2 days after date due	11	11	11
Up to one week after date due[1]	10	11	14
2-3 weeks after date due and not known[2]	10	8	11

1. fines were then 3p. per book.
2. maximum fines were then 5p. per book.

These results would suggest that about 20% of the stock could be issued on a fortnightly loan system 'and that, if the rest were issued for four instead of three weeks, the number of overdues would drop from about 30% of the total to about 10%. Only about 6% of items could apparently be kept in a one week loan collection. However, this evidence is far from conclusive, and it would to valuable to conduct further research to ascertain how library borrowers categorise their different needs and the length of time they need material for different purposes. 40% of the readers returned their books either on or within two days before or after the date due and it is probable, therefore, as the Lancaster research team also found, that very many users always return books or or about the date when they are due back, regardless of whether they have finished with them much sooner or whether, in fact, they still need them. In this case it may well be that a much larger number of books were only used during the first week and could have been conveniently returned in that time. Nor can we be sure that all those kept overdue for one week would have been returned on time were there a four week loan period in operation, though, this is, perhaps, more likely. Sending out overdue notices is a time-consuming operation and if some of this could be saved, without lowering the efficiency of the whole loan system it would make available some of the time needed to run a one or two week loan period for selected items. Every endeavour, therefore, should be made to involve the teaching staff and student community in an understanding of the obstacle to satisfaction levels caused by overdue books.

The librarian must, however, face the consequences for staffing if more advanced loan policies are followed. Maintenance of differential loan collections requires considerable staff time for monitoring recorded use and for transferring books. Improved loan policies will result in much higher issues per annum, and these, with the necessary prompt follow-up of overdues will consume a large amount of time. It is likely, also, that better satisfaction levels will be accompanied by better 'collection bias' levels, i.e. readers will have a better selection of items to choose from on the lending as well as the reference shelves,and this will probably lead to a greater amount of internal use, and once more, more work for staff straightening and replacing used books. Collection bias, a term used in the Lancaster research, is defined as the percentage of the 10% most popular books which are off the shelves at any one time. The lower this percentage the better the choice available when readers are browsing. There is some evidence that amount of library use is correlated with academic success. If this is a causal relationship, in increasing use we should be greatly helping the main purpose of the college.

Until the staffing at College A's library is improved desirable changes in loan policies cannot be implemented,though it seems very probable that the high capital sum invested in acquiring and making available each individual book would seem much more worth while if, for instance, the average use per book was increased, and over its working life in the library it received a greater number of issues. This is probably more economic than a very heavy duplication policy. One of the problems of college library work is that improvements in service rapidly lead to further increases in demand as readers enlarge the expectation of what they can obtain from the college library. College libraries are very far from satisfying the possible peak demand which could arise from better service.

One of the samples taken from the issue slips was further analysed to see whether the proportion of items returned late or early varied according to the broad subject area of each book. The following results were obtained:

Dewey Class	100 (38) %	200 (38) %	370 (60) %	500 (28) %	700 (45) %	800 (72) %	900 (34) %
Returned within							
1st week	8	8	7	4	4	7	6
2nd week	18	18	18	7	13	11	15
1st half 3rd week	8	24	12	11	20	11	15
end 3rd week	13	5	13	25	4	11	12
Returned							
on date due	24	18	17	25	20	21	18
2 days late	13	11	3	18	15	8	12
1 week late	3	11	20	11	11	21	15
2-3 week late	5	5	8	-	11	10	9

It was found, however, that there was no significant difference between these results. (F = 1.1 d.f are 72 and 38 F is lower than 1% level). Therefore, we cannot use this as a guide to decide which items need to go into a longer or shorter loan collection (See Section 4).

6. Duplication

Short loan policies are usually considered for the same titles as those which are likely to be duplicated. It is never possible for a library to provide books to saturation level, so that there will always be at least one copy of a book needed on the shelf at any one time. Indeed many librarians feel strongly that it is not good policy to provide many multiple copies of a title since they are then running a book store rather than providing a library service and it is likely that many copies will be idle on the shelves for a large part of the year. There is also the same problem in deciding which items to duplicate, as we have seen in deciding which items to put in a short loan collection; with the added one that a decision here is difficult to reverse. If a large number of copies of a certain title are acquired on the request of lecturer A to back up a course and he soon leaves to be replaced by lecturer B, who does not like that title, the books will lie unused on the shelves. In any case, as the life of titles in some fast changing subjects is now very short, many duplicate copies will prove of short term value only. College B does not buy any duplicate copies until it has satisfied itself, by reference to use made of the first copy, that such purchases will be worth while. However, that method is only satisfactory if the duplicate copy can then be acquired in time to be of use. Evidence from the Failure Survey shows us that between 11% and 30% of the failure is caused by the same item failing more than once. (See also Part III A Section 16.)

TABLE 1. MULTIPLE FAILURE

Titles causing 1 failure	No.Titles	% Titles failing	% Total Failure
College A	281	85.4	69.4
B	359	95.2	88.6
C	384	92.8	84.9
Titles causing 2 failures			
College A	32	9.7	15.8
B	11	2.9	5.4
C	23	5.5	10.2
Titles causing more than 2 failures			
College A	16	4.9	14.8
B	7	1.9	5.9
C	7	1.7	4.9
Titles causing more than 1 failure			
College A	48	14.6	30.6
B	18	4.8	11.4
C	30	7.2	15.1

Morse[1] has suggested a method by which the likely future use of items in a particular section of stock can be gauged with reference to past use, and this could be useful in deciding when an item which was in demand was likely to remain in eavy use for long enough for purchase of a further copy to be worthwhile.

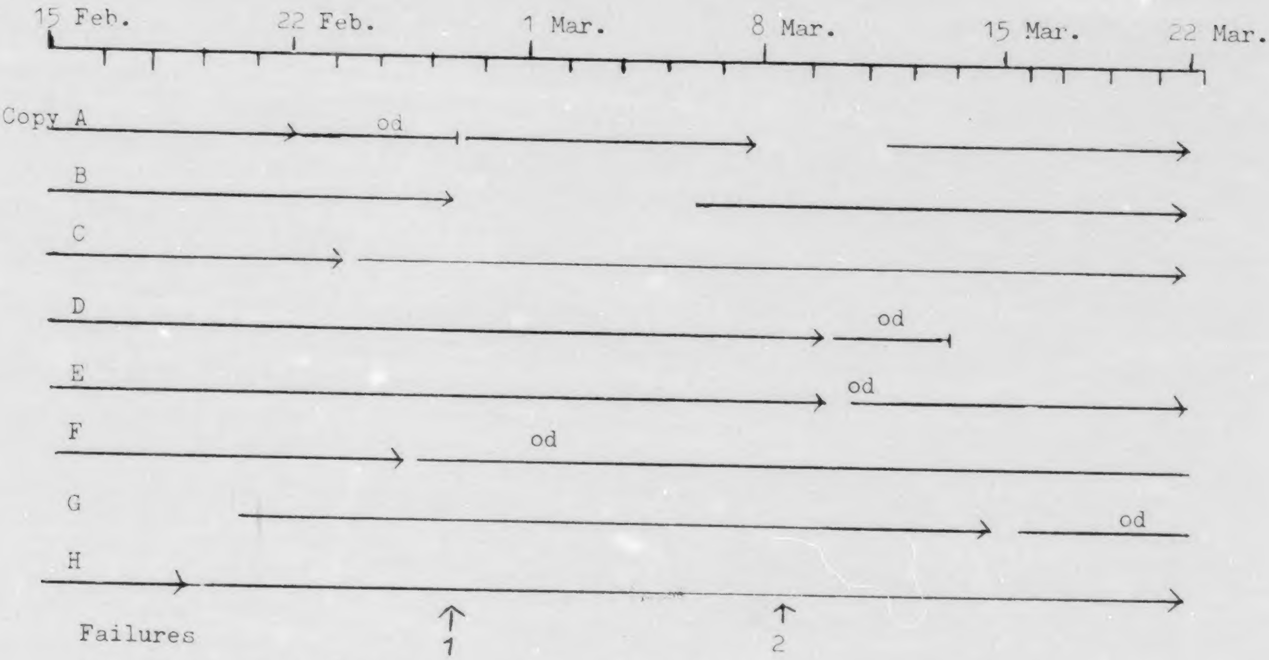
The method, termed the Markov process, involves investigating the past circulation history of books and ascertaining, how often they went out in year 1. From this can be calculated the probability that a given type of book, with given popularity at a certain period in time will remain popular for a long or short time. He found, for instance, that in his library Geology books lose popularity quickly, but Mathematics books do so more slowly. This information along with the calculations he shows earlier in the book on queueing systems, can be used to calculate how much unnotified demand there will be in the future for that book and, therefore, to indicate whether further copies should be purchased. Further research into book use, using these methods is urgently called for. Full details of the techniques involved and methodology are explained in Chapter 4, "Queues and Book Circulation Interference", and Chapter 5 "Book Use and the Markov Process" of Morse's book.

7. Case studies

Although we have not, during this project, been able to investigate queuing theory as applied to book circulation some actual situations concerning failure to find items needed when multiple copies were available, have been investigated. These are based on the expressed demand for the books concerned

1. Morse P.M. Library effectiveness: a systems approach. M.I.T. 1968 p.68 Table 5.7 p.97 Table 4.1

CASE STUDY 1. Hilgard and Atkinson. Introduction to psychology.

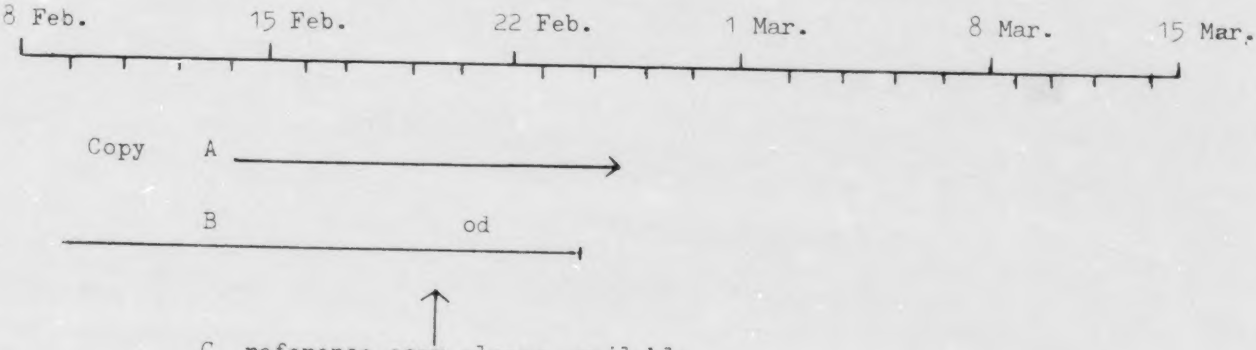


Also 3 R.L. copies A, B, C, each used by 7 people from 22nd Feb. - 19th March.

Expressed demand 34 Satisfaction 32

At time of checking on Failure 1 both A and B copies were on the shelf; it is possible that either one or both were available to that reader. In any case, two overdues - A and F, certainly caused Failure 1. Only copy A appears to have been available to Failure 2, but it may have been on internal use in the library. Altogether, 21 people used 3 R.L. copies in the same period that 11 others used the 8 lending copies. 2 further copies on 1 week loan period would fully meet demand, which was already nearly met.

CASE STUDY 2. Harrison Clarke H. - Muscular strength and endurance in man



C reference copy always available.

Expressed Demand 3 Satisfaction 2

If book had not been left seriously overdue no failure would have occurred. No need for action.

from information gained by means of failure slips handed in during a Failure Survey at College A (see Section 14). They do not, therefore, show unrecorded unsatisfied demand for the titles examined and this obviously includes all possible subject searching or borrowing during which, had this item been available, it might have been used. Morse's methods of estimation referred to above, would take this into account by means of a system of probability models.

Two examples of case studies are given. Further examples will be found in Table 3, Appendix II. Each line represents a copy of the title, the arrowhead showing when the book was returned or, in the case of overdues (o.d), when it was due back. Broken lines at the right hand side show books on loan beyond 22nd March. Failures occurring between 15th February and 22nd March are marked by vertical arrows at the bottom. In each case, estimates are made of measures needed to eliminate failure in terms of more copies or different loan periods.

8. Frequency of use

Two different investigations were carried out at College A into the frequency of borrowing use of the library stock. The first of these involved sampling the stock on the shelves and was initially carried out in the Summer of 1971. An attempt was made to investigate the use of the reference stock and periodicals, but this proved unsatisfactory as the record of use was too inaccurate, (see Section 16).

It is interesting to compare the percentage of books in the various frequency of use categories with those found in the survey of a sample of 876 books done at Lancaster in 1969 (of which 119 or 14% were on loan or missing). They seem to be very close. For a full breakdown into classes see Table 3, Section 9.

Number of uses	0	1	2	3	4	5	6	7	8	9	10	15
1 year College A (1971) Main Library	48	19	12	7	5	4	2	2	1	0.3	0.1	
2 years College A (1972) Main Library	38	18	9	7	7	6	3	4	3	1	3	0.6
1 year Lancaster (1969) University	50	22	14	6	5	2	1	0.4	0.8	0.1	0.1	

After corrections have been made in relation to issues and to incorporate those books missing from the sample (See Table 4 in Appendix II), the best estimate of the percentage of the whole sample not used in one year is 37% for main library books and 25% for school services books. The whole of the issues made by the remaining books must have been distributed in such a way that the average annual issue is raised to 1.67 for main library books and 1.97 for school service books. Main library books issued from two to five times would account for over half the total issues, and school service library books issued from one to five times would account for almost 90% of the total issues.

From these figures, however, it does appear that the majority of main library books, 62% and school services library books. c. 75% were, in fact, used in one year, and that the issues of main library books are well distributed over the once to eight times a year categories. Because of the incidence of school practice in three main peaks during the year the pattern of issues of school services books is rather more concentrated on once to four times a year. The figures do not include internal use, and we have reason to believe that books receive one and a half times as much internal as external use. Thus, some books apparently with no use were certainly used within the library building.

In the summer of 1972 an up to date sample of stock was needed to check the number of books missing, this being the last opportunity to establish this before a Diver Detection System was installed and operated in a new library. Results obtained from this sample (See Appendix II, Table 4.3) are as follows:; after similar corrections have been made in relation to actual issues.

TABLE 2 MAIN LIBRARY

Average issue per item 3.17

Number of uses	0	1-3.17	3.18 -15	Total books	Total issues	%
Total books	181	196	196	573		
Total issues	0	909	909		1818	
% books	31.6	34.2	34.2			100
% issues	0	50	50			100

SCHOOL SERVICES LIBRARY

Average issue per item 3.74

Number of uses	0	1-3.74	3.75 -15	Total books	Total issues	%
Total books	33	77	77	187		
Total issues	0	350	350		699	
% books	17.6	41.2	41.2			100
% issues	0	50	50			100

These results indicate that about 70% of main library books and 82% of schools services books were borrowed at least once in two years.

The issues in the two year sample naturally spread into categories of use as high as fifteen times and the main library category which produces the largest percentage of issues is books issued seven times, compared with books issued twice in the one year sample. It is noticeable also that books in the school services library receive considerably more intensive use and, therefore, can be expected to have a shorter working life, also the proportion not used at all in two years is very much lower. A policy of duplication should help improve the levels of both these factors, and help remove the depleted look college libraries have at certain times, but saturation point can and should not be reached because there are many titles which students should buy for themselves and also they must be ready to spread their search over a wider range of titles.

9. Frequency of use by subject

The second investigation was made by means of three samples taken from the issue slips for returned books collected over twelve weeks, as described in section 5 . These, of course, only showed the proportion of issues resulting from these copies and cannot tell us anything about non-use, or about the number of issues per title. They can be compared, however, with the proportion of use per subject as found from the stock sample surveys, with the following results for main library books.

TABLE 3. USE BY SUBJECT

	Proportion of issues by subject					Proportion of library books by subject		
	Stock check		Issue check			Stock check		Bay check
Class	1 %	2 %	1 %	2 %	3 %	1 %	2 %	
Generalia	1	-	1	-	2	2	1	1
Philosophy & Psychology	9	5	12	12	12	4	4	5
Religion	5	7	2	4	3	6	10	
Social Science	8	8	10	9	10	10	9	
Education	20	15	19	23	18	18	11	16
Language	1	2	2	2	3	2	1	1
Science	8	12	8	9	7	10	12	
Technology	2	1	2	1	2	4	3	
Fine Arts, inc. Games & Music	16	12	14	11	13	12	10	9
Literature	15	18	19	19	20	12	14	13
History, Biography & Geography	12	14	10	8	9	12	12	11
Local Studies	2	4	1	1	1	4	5	
Childhood experience	1	2	-	-	-	5	8	

X^2 and F tests showed no significant difference between these results.

$X^2 = 11.6$ $P = .9$ $F = 1.9$ dfs = 13 $P = .05$

The 6th. and 7th. columns show the percentage of each section of stock occurring in the 2 samples of stock taken. The last column shows approximate proportions of selected sections of stock obtained by counting the number of bays occupied by that part of the main lending stock. Except in the case of language, differences occurring between the proportions of books indicated by stock check samples 1 and 2 lie in the same direction as the difference between the proportions of issues found by means of the same samples. Thus Science issue proportions for these samples is 8% and 12%; the book proportions are 10% and 12% respectively. Therefore, this confirms that only sampling error has occurred here. The biggest difference in each case is in Education and a comparison with proportions of issues obtained in the other samples suggests that the sample of 2 years has under represented the Education stock. It will be remembered that this systematic sample was drawn from authors' names beginning with B. This method is based on an investigation of a National Bibliography where all subjects are represented according to the actual publications in each field. An indicative sample of 100 issue slips for the author B and 100 random slips taken for the 12 week period suggests that this particular letter slightly under represents the total Education stock, or at least that part of it which received use.

Proportion of Education stock acc. to 'B' sample	11%
Proportion of Education stock acc. to random sample	19%

51

If the general pattern of proportions shown above is correct, then Philosophy and Psychology, Education and Literature are producing proportionately more issues than the stock proportions would lead us to expect. It is likely that the heavily used areas as those where failures most often occur, and there may be a need for improved or increased stocks of such sections. Recollections of Childhood, Local History, Religion and Technology classes are slightly less used than their stock proportions would lead us to expect. It is not so easy to decide on what action is needed where a section is under-used. Local history and Recollections of Childhood are historical collections and likely to receive less frequent use. The John Seymour collection of Brontë material which is mainly a reference collection was so little used for loan that it has been ignored altogether in these calculations.

The following table shows the proportions of issues for various groups of subjects alongside approximate proportions of students studying in related departments.

TABLE 4 Issues by subject in relation to size of subject department

Dewey Class	Issues %	Students %
200	6	6
300-369	11	7
400+800	31	39
500+600	14	15
700	20	17
900	17	17

The close correlation between these two sets of percentages is remarkable, when it is remembered that students' courses of study and the Dewey classification system do not relate to each other very precisely and many students use materials from a wide variety of different subject areas. However, courses such as Modern Studies which are particularly prone to this difficulty have not been included in the above figures.

If we take Education subjects to be represented by the 000, 100 and 370 classes together, i.e. those classes which all students use, then the issues would amount to approximately 31% of the total main lending issues. Since all students study Education and at least a third of their time is spent on this and the related subjects covered by the above mentioned sections of library stock, this figure would seem to be a little lower than expected or desirable.

Some further breakdowns of the use made between classes were carried out, and are shown in Table 5.

From this we can see that the specific part of the Philosophy and Psychology class which receives heavy use is Child Psychology and the part of the Literature class which is very heavily used in proportion to the part of total stock it occupies is English and American literature, the rest of this main class being under-used. The proportion of students using this class in comparison with the issues is approximately as follows:-

	Issues %	Students %
English and American literature	95	86
Other literature	5	14

TABLE 5. PROPORTION OF ISSUES BY DETAILED SUBJECT RELATED TO PROPORTIONS OF BOOKS

	Issues				Books		
	Stock check		Issue check		Stock check		Bay check
	1	2	2	3	1	2	
	%	%	%	%	%	%	%
General philosophy, psychology, inc. child psychology	5	3	6		2	2	
Psychology, inc. learning theory	3	1	4		1	1	
Modern Philosophy	1	*	1		1	1	
Total	9	4	11		4	4	
Sociology, economics and politics	7	8			9	7	
Transport and folklore	1	1			1	1	
Total	8	9			10	8	
English and American literature			19	19			8
Other literature				1			3
Translations			1				1
Total			20	20			12

* Less than 1%

From this point of view also the latter part of this class is less used than perhaps it should be. The question of why these students are under-using this class remains to be investigated further. Of course, students of foreign languages have to spend more time on oral and language laboratory work than students of American and English literature and thus have less time for reading. Furthermore, courses available at the time of the Survey were less advanced than those in English and American studies.

BEST COPY AVAILABLE

10. General Comments

At College A the total issues to staff and students in the year 1971/72 amounted to 95,500 from a stock of 55,000 items. Every book, therefore, on average circulated 1.7 times in a year. In two years books circulated on average 3.17 times main lending and 3.74 school services. In five years a book might expect to circulate some seven or eight times. These figures must be increased by 150% to include internal use, and thus the average book in five years would circulate 17-20 times. Of course, many books circulate less frequently, and a very small number not at all, while at the other extreme books which circulate ten times a year externally, and are used internally as well may need to be replaced before five years had passed. Also as stock dates, issues tend to come always from the most recent books. Improved loan policies would still further increase the amount of use, even when allowance is made for a certain increase in the renewals of the same books. Of course, the issue of a book is a very variable measure. It may mean a casual glance at one page of one picture, or a full intensive reading cover to cover. But no other measure is readily available in considering amounts of use received by library books.

With amounts of use of this order in college libraries, it certainly seems necessary to maintain and improve stocks.

Each student or member of staff at College A borrowed in 1971/72 an average of 56 books in a year. The following table gives some comparative figures from other university libraries, all main and departmental libraries being included, and users being total students and total academic staff, including research assistants. Figures are taken from library annual reports and the Commonwealth Universities Yearbook.

Institution	Year	No.of Users	No.of issues of books	Issues per user	Book Stock	Issues per item in stock
University 1[1]	1971/2	3360	254415	76	231841	1.1
College F	1971/2	860	58504[2]	68	61433[2]	1.0
College D	1971/2	960	63384[2]	66	60000[2]	1.1
College E	1971/2	985	61070	62	32408	1.9
College A	1971/2	1702	95500	56	69378	1.4
University 2[3]	1970/1	2133	118180	55	187000	.6
University 3[3]	1970/1	5499	199602	36	344814	.6
University 4	1970/1	4747	152617	32	492780	.3
University 5	1970/1	7238	224762	31	432299	.5

[1] uses an advanced variable loans policy
[2] includes audiovisual items
[3] includes issues from 3 or 4 short loan collections

Internal:External use ratios in those universities where this has been investigated apparently vary from 3:2 to 11:1 while ratios in the colleges we investigated during the survey of use varied from 3:4 to 4:1 (See Part V A Section 9 Table 5)

Unfortunately it has not been possible to investigate frequency of use in any other colleges. Some college libraries have records of issue in the books, but f[illegible] have the staff time to produce a sufficient sample and conduct a count of issues when there are so many more pressing tasks. However, for management purposes such a survey, when combined with other data, produces most important information and helps to throw light on the best selection, duplication and loan policies. For this reason College A has decided to continue to make records of issues in books, although it is not needed as part of the issue procedure. If issue systems could be computerised still more valuable information could be stored so that duplication and loan policies could match demand much more closely and reservation systems be operated so much more speedily by means of a trapping store. Methods of conducting such a survey are described in Buckland and in Morse.

11. Peaking of Demand

We have already discussed the effects which sudden heavy demands on particular titles by a section of the student population can have on library management. There are also sudden increases in demand. This is endemic in all academic institutions at times of examinations and main assignments. However, in a college of education the situation arises even more frequently because of the heavy peaks of demand before teaching practice and corresponding peaks of library work, shelving returned items, immediately after teaching practice. On those occasions when one teaching practice is immediately followed by another the situation is particularly acute. The following table shows the proportion of total issues occurring in certain proportions of the year in five colleges. In the examples below, periods of time have been selected during which peaking of issue figures occurred. 2% of the year equals one week.

College:	A	E	R	T	Q
% of year (52 weeks)	2	-	2	-	2
% of term year (34 weeks)	3	-	3	-	3
% of total issues for the year	6	-	4	-	5
% of year (52 weeks)	4	6	-	-	4
% of term year (34 weeks)	6	9	-	-	6
% of total issues for the year	10	17	-	-	9
% of year (52 weeks)	10	10	13	-	-
% of term year (34 weeks)	15	15	21	-	-
% of total issues for the year	24	26	27	-	-
% of year (52 weeks)	-	19	-	17*	-
% of term year (34 weeks)	-	29	-	26	-
% of total issues for the year	-	39	-	27	-

* based on monthly issue statistics which could hide peaking of demand.

The following amounts of time may have been occupied just on Circulation during these peak periods.

College A	College E	College R	College Q
3 mins. each	2 mins. each	3 mins.each	3 mins.each
1267 hrs.	556 hrs.	988 hrs.	207 hrs.
5 weeks	5 weeks	7 weeks	2 weeks
1460 hours available not counting Acad.staff	825 hours available not counting Acad.staff	1942 hours available not counting Acad.staff	259 hours available not counting Acad.staff

(See Part IV, Section 53.)

It is reasonable to suppose that at these peak times when the students are making most use of materials and searching the library for teaching practice materials, the amount of time needed for Readers' advice is also greater than normal. The time study suggested that this was about 25 minutes per student at College A per year, and 34 minutes per student at College E. (See Part IV Section 73). This would be .7 minutes and 1 minute per term week respectively. We can probably assume a minimum of 1 and 1.5 minutes respectively on average per student per week during these periods of heavy use. This would require extra staff hours of 130 at College A and 120 hours at College E for the five weeks referred to above. At College A there would then be only 53 hours left and at College E only 139 hours left, yet the shelving and straightening of the library, reservations and ILL servicing must continue and the academic staff's time will be as filled with their usual administrative, selection and liaison duties as normal, and there is no reason to suppose that they would be any more available to help with these problems than they usually are. That is to say they may in fact do about one half of the Readers' advice work. The figures suggest that Colleges A and Q would theoretically be unable to service peaks of the size they are experiencing and College E would find it only just possible. Should a member of staff fall ill the situation could become intolerable. This kind of peak requires very careful management because the other tasks of the library, such as processing materials, preparing bibliographies and displays, and teaching have to be carried out at a high enough rate at other times of the year to allow them to be left to one side during these peak periods without backlogs developing. (See Part IV, Sections 59 - 63 and 67).

In addition to teaching practice peaks, some libraries especially those with termly loan periods, have very high beginning and end of term peaks. At one such college the final weeks of the Autumn and Spring term and the two final weeks of the Summer term (i.e. 12% of the term weeks) accounted for 20% of the issues.

The following diagrams, Tables 6.1 to 6.3. give a picture of the college year, showing these and other causes of peaks and dips in library use.

12. School Services Stock

Much of the peaking of demand we have just investigated concerns stock, both books and audiovisual aids, used for teaching practice. Both the two stock check samples and the three issue slip samples included books from the School Services collections at College A. For details of the proportions of each type issued and number of issues made according to the stock samples (See Tables 2 Section 8 and 4.1 and 4.3 in Appendix II). This stock is used for curriculum studies, English options and by staff, throughout the year; as well as for teaching practice.

According to these surveys 19% to 24% of the stock issued during twelve fairly busy weeks was School Services materials. 33% of the annual issues are from School Services stock. The three issue slip samples broke down into the following elements:

	%	%	%
Secondary	23	16	17
Primary	35	39	38
Textbooks	28	25	25
Fiction Secondary	3	4	2
Fiction Primary	23	16	12

TABLE 6.1 PATTERN OF ISSUES FROM LIBRARY COLLECTIONS for the year 1971 - 2 COLLEGE A

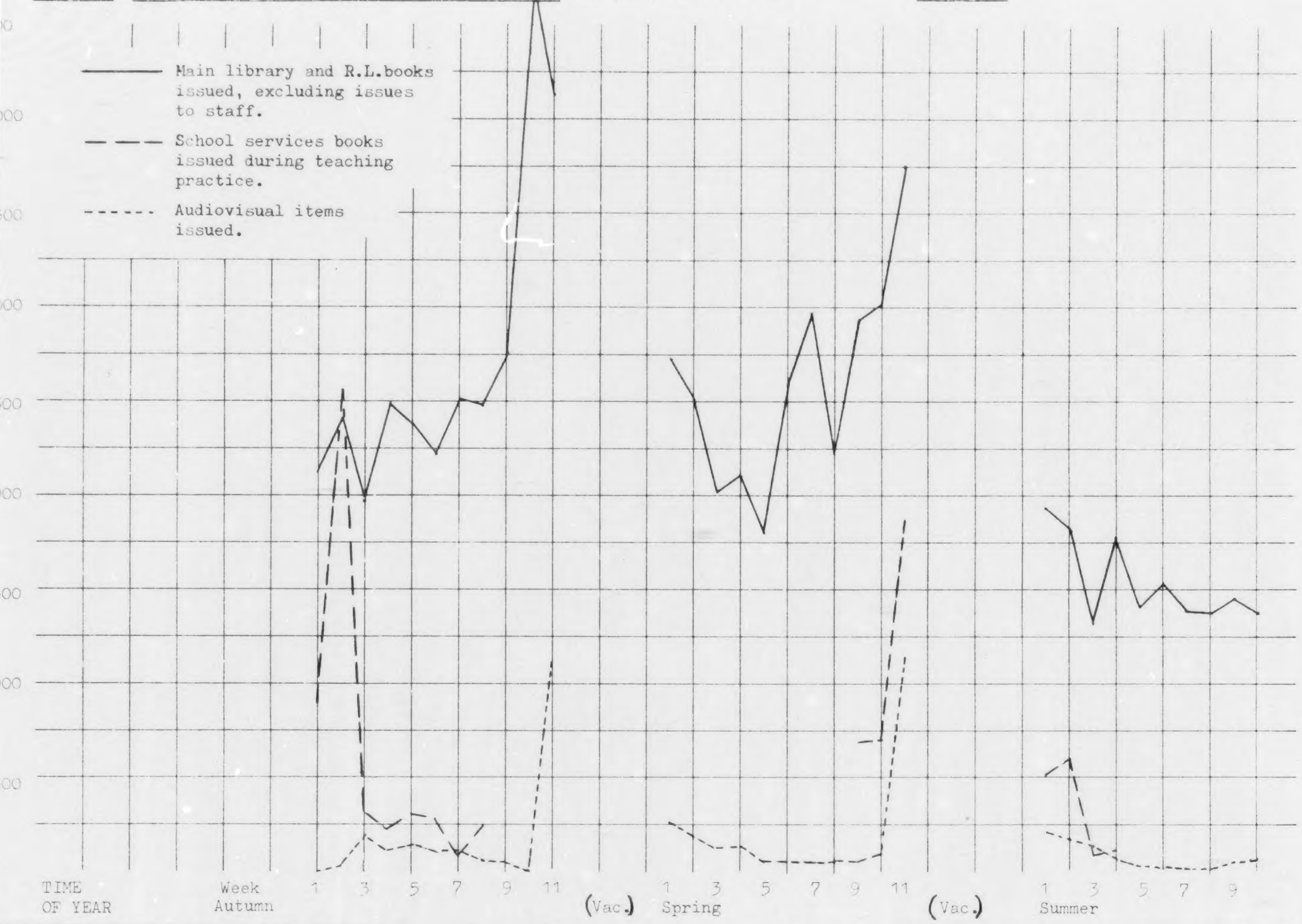


TABLE 6.2 PATTERN OF ISSUES FROM LIBRARY COLLECTIONS for the year 1971 - 2 COLLEGE E

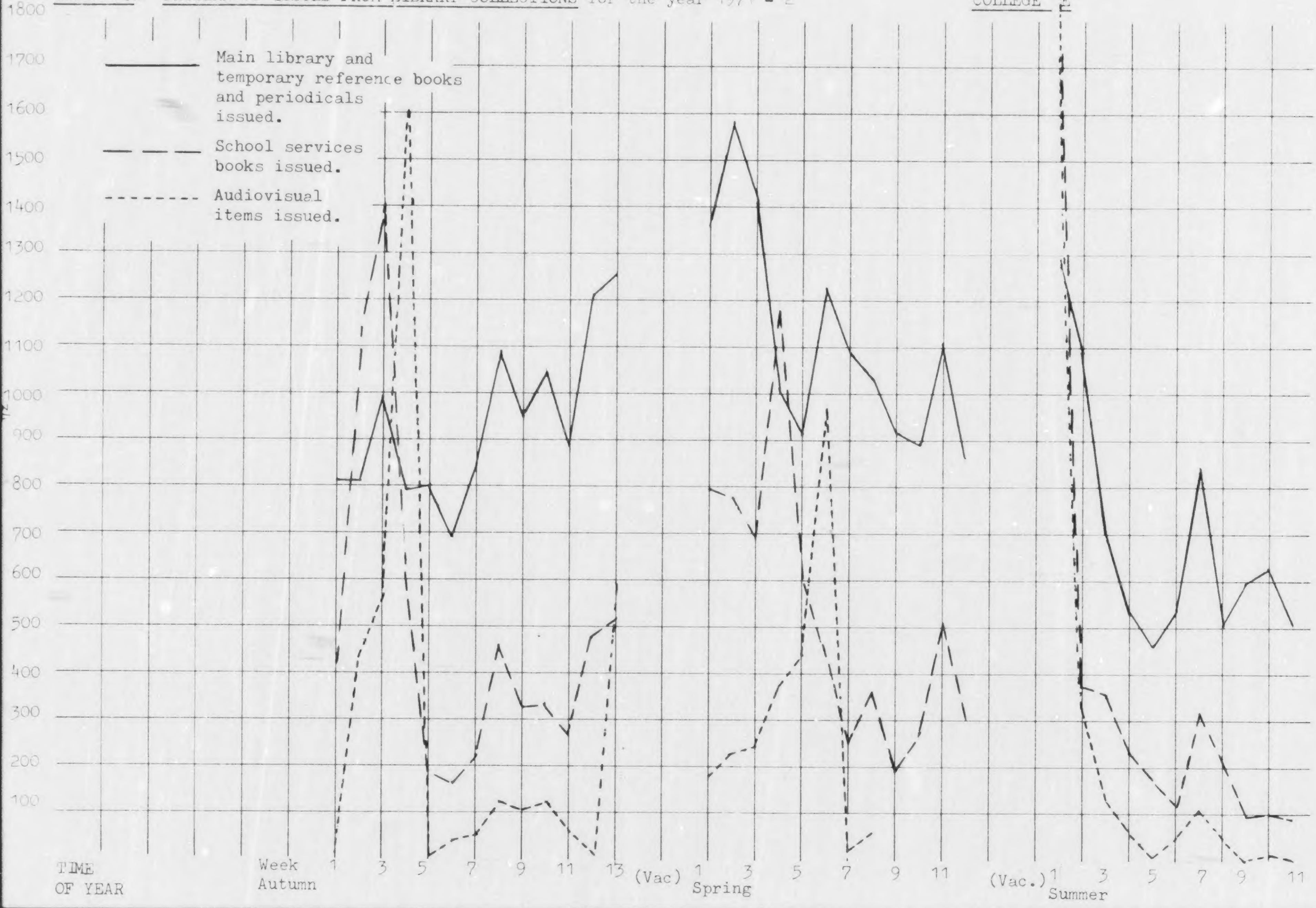
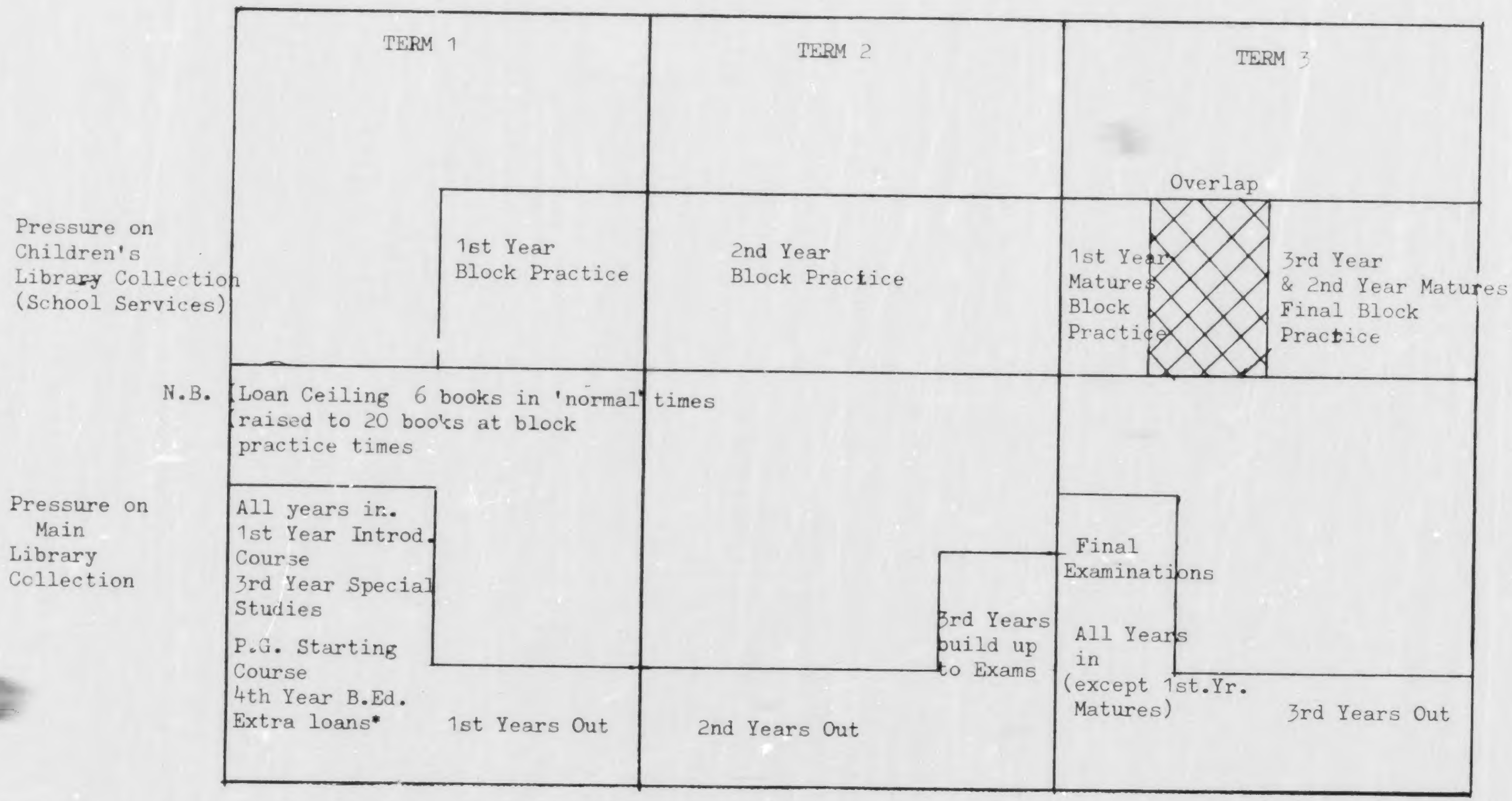


TABLE 6.3

PATTERN OF COLLEGE YEAR IN TERMS OF PRESSURE ON LIBRARY COLLECTIONS: COLLEGE C 1971/2


TERM 1
TERM 2
TERM 3
Pressure on Children's Library Collection (School Services)
1st Year Block Practice
2nd Year Block Practice
Overlap
1st Year Matures Block Practice
3rd Year & 2nd Year Matures Final Block Practice
N.B. Loan Ceiling 6 books in 'normal' times raised to 20 books at block practice times
Pressure on Main Library Collection
All years in.
1st Year Introd. Course
3rd Year Special Studies
P.G. Starting Course
4th Year B.Ed. Extra loans*
1st Years Out
2nd Years Out
3rd Years build up to Exams
Final Examinations
All Years in (except 1st.Yr. Matures)
3rd Years Out

N.B. * (1-3 years 8 books loan ceiling)
(4th year 12 books loan ceiling)

It is also worth noting that School Service stock generally has a shorter life because it is used more intensively and is less well made. Furthermore a smaller proportion than of main stock, 28% in one year and 18% in two years is not issued at all.

So far we have discussed the amount of use items receive, and the ways in which users' demands can be more frequently met.

13. Reservations.

One way in which libraries try to help readers fulfil their needs when items are out on loan is by a reservation system. However, it is certain that readers do not always make a reservation when they fail to find a wanted book. In addition some reservations are never collected. It was therefore necessary to investigate the reasons why the service was not always used and the extent to which it operated satisfactorily.

The major problem, apart from lack of awareness of the service, would seem to be the length of time it takes to get a required book into the reader's hands. In some libraries a book is recalled when a reservation has been made, providing the reader holding it has had it for at least one or two weeks. In the case of a queue of several reservations for the same title the book may be recalled even earlier and then put on restricted loan (See Section 4). This is a policy usually only adopted in colleges where a long loan system is operated and it depends on the issue record being kept in author order, so that items on loan can easily be traced. Elsewhere, especially if the issue period is only two to four weeks, books are not recalled but put on one side when returned. A special letter may be sent out to holders of reserved books which become overdue. This practice, however, is also only practical if the issue records are in author order. If, as at College A, a Bookamatic charging system requiring the filing of slips in transaction number order is used, a visible index is needed against which all books returned to the counter have to be checked for reservations. It is virtually impossible to search the slips themselves for reserved items, but the system does ensure that the first copy to be returned is used, and the first to reach the overdue situation is recalled. In addition, delays occur where the external postal service is used.

Because of such difficulties, reservations often take considerable time to fulfil. In addition, although some of the books wanted will prove to have been on the shelves all the time, and can therefore be found and provided very quickly, others will ultimately prove to be missing and the reservation may take weeks or months to fulfil by acquiring a replacement. A few of the reservations will be for items not in stock, and decisions to buy of acquire through ILL will take time, others will have been inaccurately described and correct bibliographic details may have to be sought before the book can be traced.

College A's reservations made in the Spring and Summer terms of 1971 were analysed. As a result the slip was modified to allow students to indicate the last date by which the item would be useful. This saved staff spending time looking for books which were no longer needed and prevented items being kept off the shelves, and thus out of browsing use, longer than necessary. The system was then analysed again in Autumn 1971, a full report of the analysis is contained in Education Libraries Bulletin, No. 44 Summer 1972. Reservation slips were also analysed from Colleges C and D, although unfortunately it was not possible to produce completely compatible data from these other colleges. It seems worthwhile for colleges who wish to streamline their reservation systems and increase their usefulness, to add to the reservation form a request for information on when the item is needed.

TABLE 7

	A	C	D	H
Reservations Made	100 (1647)	100 (277)	100 (70)	100 (101)
Collected	60	66	73	96 *
Library failed to supply	21	14	21	1
Reader did not collect	10	9	6	2
Insufficient data	9	10	-	2
	12 months.	12 months includes failure slips used as reservations	6 weeks. (new system)	18 weeks.

* These were made available by the library. It is not known whether all were collected.

Table 5 in Appendix II shows further details for College A, and notes possible reasons why some were unsuccessful. The extra data acquired in the Autumn term at College A shows that two thirds of these failures were due to the item not being found in time to be of use to the reader.

Actual and Preferred time intervals between Reservation and Collection of Books

Time Interval in days	Actual	Preferred
	100 (578)	100 (340) * (See over)
1.	.2	1.5
2.	6.7	4.7
3.	8.7	7.6
4.	23.5	15.2
5.	29.5	25.8
6.	35.9	34.6
7.	39.2	39.6
8.	41.7	48.1
9.	43.8	52.8
10.	46.8	56.6
11.	48.2	67.8
12.	49.4	74.0
13.	50.9	76.6
14.	51.4	77.2
15.	52.5	80.7
16.	52.6	81.9
17.	53.1	83.7
18.	53.7	85.5
19.	53.8	86.1
20.	54.2	87.9
21 - 30	55.0	94.4
21 - 40	55.5	97
41 - 50	55.5	97
51 - 60	55.9	97
61 - 80	-	100
Unknown	62.0	-

- 240 people gave no preferred date but it is assumed that their preferences would be similar to those who did cooperate in giving this information. It could, however, be the case that they were in less of a hurry than some of those indicating the last useful date.

Further details can be found in Table 6 in Appendix II. From this it would appear that successful reservations were acquired, on average, a little quicker than readers needed them. However this does not include those items which were not obtained. It would seem, therefore, that an item will either be obtained more quickly than the reader expects or too late to be of use.

The reservation slips at two colleges were also analysed by subject. See Table 8 . As we would expect, most reservations are for educational materials. The second heaviest demand at College A was for English and American literature, which was found in the samples of stock and issue slips (see Section 9) to be a very heavily used section of the library. In fact most of these results are those we would expect from the pattern of frequency of use already shown on Tables 3, 4 and 5 in Section 9. Unfortunately no similar corroborative information is available for College C.

TABLE 8 Reservations by Subject.

	A % (1060)	C % (277)
Education including Philosophy and Psychology	51	57
English and American Literature	15	6
Language	1	.5
European Studies	1	1
Religion	1	2
Science including Maths.	3	5.5
Sociology	7	10
Geography and History	9	8
P.E., Music and Art	5	10
School Services books	5	-
Unassigned	2	-

During the course of the Failure Survey students were asked what action they took or would take on failing to find what they looked for. The following results were obtained. See Table overleaf

TABLE 9

Courses of Action Taken (or to be taken) on Failing

	A.1 100 (350)		A.2 100 (290)		B 100 (126)		C 100 (192)		G 100 (132)	
Come back later	16.8	1*	22.1	1*	12.5	3*	12.5	1*	22.7	1*
Try another library	16.3	2	12.4	3	1.5	2	11.4	4	16.7	2
Borrow from a friend	11.1	3	9.0	4	8.8	6	8.3	7	9.1	3
Try restricted loan	9.7	4	7.6	6	11.0	4	10.4	5	2.8	9
Find a substitute	8.8	5	13.8	2	2.9	8	14.1	1	12.9	4
Make a reservation	8.3	6	6.9	7	19.1	1	6.8	7	0	0
Consult the library staff	7.4	7	5.5	9	9.5	5	8.8	6	3.8	8
Check the class number	7.4	8	6.9	7	2.9	8	14	2	9.8	5
Look in the stack	6.6	9	8.6	5	0	0	4.1	10	2.3	10
Consult academic staff	4.6	10	3.1	11	2.9	3	6.3	9	8.3	6
Buy book	2.6	11	3.4	10	8.8	6	3.1	11	6.8	7
Other	.3	12	.7	12	.7	11	0	0	1.5	11

N.B. These figures include returns from some people who did not actually fail on that visit.

* indicates the order of priority.

Most people indicated more than one type of action and "Make a reservation" received between 7% and 19% of the total. However, at College B it came first in order of preferred action. There the reservations service is very heavily used. However, since at most colleges other means of obtaining unavailable materials, notably "Come back later", "Try another library", "Borrow from a friend", or "Find a substitute", are preferred, reservation analysis is not an adequate means of judging the satisfaction level in the library. For this other techniques must be devised.

The proportion of total issues which reservations generate can be seen in the following table:

Number of Reservations as a Percentage of Total Issues.

A %	B %	C %	D %	E %	F %
1.3	16[1]	.5[1]	.8[2]	2.6	1

[1] Annual issues estimated from counts made during three weeks.

[2] New reservation system which has not run for quite a full year. Use of this will probably increase.

The lowest proportion is at College C, but this may be higher in the future. 37% of their reservations occurred in the six weeks at the end of the year investigated, and after the failure survey took place. This increase was presumably a result of the increased awareness of the service brought about by the failure survey, and if it continues reservations may be, in future, about 1.1% of total issues, assuming no corresponding increase in issues. If a librarian wishes to improve his reservation system he should advertise it well and maintain liaison with the requesting reader as was done at College C during the failure survey (See Section 19).

14. Failure Surveys

Failure surveys were made at three colleges running from four weeks to ten weeks at different times of the year.* The purpose of the survey was:

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* For a brief description, see Appendix II Table 7.

TABLE 10 CAUSES OF FAILURE

Causes of Failure	College A 100 (405)	College B 100 (405)	College C 100 (446)
Unidentifiable	1.5		1.1
Book available but missed by reader	7.9	3.7	5.1
Incorrect details, book available	2.5	.2	8.3
Book available in short loan collection	2.1	11.9	1.8
Class number not known, book available	3.5	.5	
In process	1.5	-	1.8
Total reader failure	19.0	16.3	16.3
In process	-	-	1.8
Not in stock	9.6	25.7	19.1 **
At binding or repairs	.5		2.0
On returned book trolley	1.5		1.3
Reservations awaiting collection	2.2		.7
Missing or seriously misplaced	6.2		11.9
On internal use	1.3		.7
on loan to staff	5.7	48.4	4.7
overdue to staff	.2		37.0
on loan to students)	37.5		4.5
overdue to students)			
Incorrect class or no class number but book not available	16.3	[illegible].6	-
Total library failure	81.0	83.7	83.7

* See Section

** "includes 24 items checked by one assiduous reader against a specialist bibliography on child care".

(a) to measure the availability of materials and to discover and, if possible, quantify the reasons why readers fail to find what they look for in the library.

(b) to provide a concrete basis of facts and figures for guidance when deciding on priorities and measures to improve services if these are shown to be inadequate. For example, loan periods of different lengths, duplication, reservation system and the acquisition of materials not in stock by purchase or ILL.

(c) to ascertain the failure rate for specific items and the amount of internal use of library materials at a time of typical use when most students were in college.

(d) to discover and measure how far failure arises from the inadequacies of the reader and the deficiencies of the library.

(e) to discover the effect of failure on readers, what subsequent action they took and what effect they thought failure would have on their work.

15. Causes of Failure

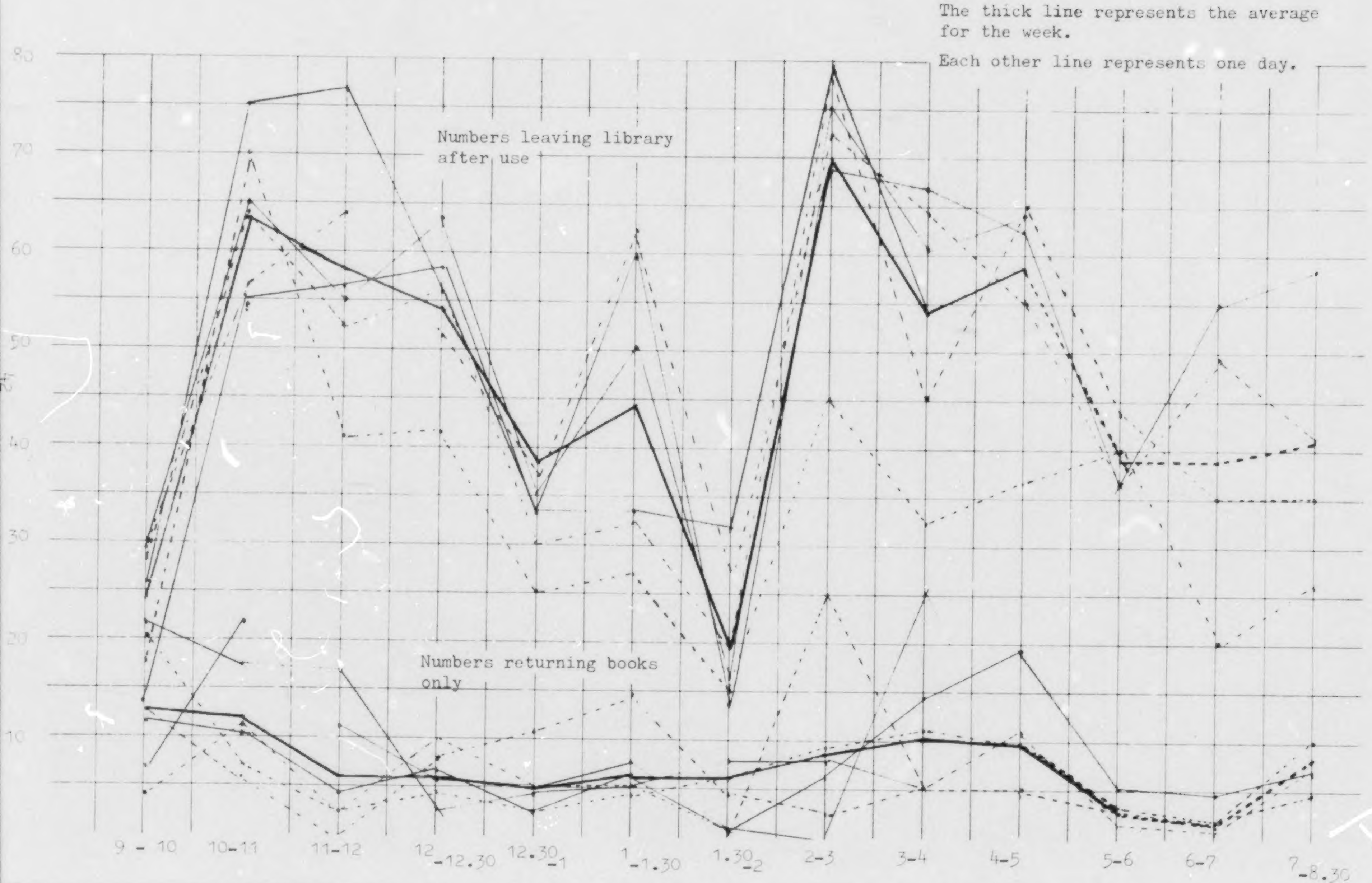
The main causes of failure were obtained by analysis of the slips and are set out in Table 10. In all colleges the largest single cause was that titles sought were out on loan to other users, but as the number of copies in stock will always be insufficient to satisfy concurrent demand for every title, and as a lending service is offered to users, this is inevitable. Between 5% and 15% of titles failed more than once, but only 2% to 5% failed more than twice. (See Section 14 Table 10). Books which failed because they were on the returned book trolley, (1.5%) are, to some extent, also failures due to loan and a proportion of the 16.2 to 10.4% due to items missing or misplaced will be failures due to illicit borrowing. It is worth noting that about 10% of the 'on loan' failures are due to books being overdue and therefore prompt recall is very important.

On the other hand, only .5 to 1.3% failed because they were being used within the library. Unless it is assumed that the small percentage of failures due to internal use indicates a small amount of internal use, these proportions probably show that books used within the library are more effectively used because they have a greater chance of being available to further users. It is important therefore to try to obtain some estimate of internal use. It is fairly straightforward to count the number of books issued on loan. With a closed access collection it would also be possible to keep a record of books used internally. But most materials in college of education libraries are on open access, so that the only way to obtain a hard figure comparable to issue figures is to require all users to leave books they remove from the shelves on the tables, so that they can be counted and/or stamped. It is impossible to obtain 100% cooperation especially in a library such as College B's where there are no working surfaces near the book stacks where books can be conveniently left. This method also makes extra work for staff, but would mean less straightening and prevent failures arising from misplaced books.

16. Internal use

During the failure survey library users were asked not to re-shelve books, but when asked in the questionnaire if they had left books on tables, between one third and one half only had done so. At College A, an attempt was made to calculate the frequency of use of reference books in the same way as that of lending stock (See Section 8). All reference books left on tables were stamped and re-shelved at frequent and regular intervals during the day. However, because of the small size of the sample drawn from reference stock and because of the uncertainty of how often books were used without being stamped, or were used several times while lying on a table, the results obtained were found to be

TABLE 11 DAILY PATTERN OF LIBRARY USE College A Summer 1971



The thick line represents the average for the week.

Each other line represents one day.

meaningless. More research needs to be done before the problem of assessing the actual amount of internal use is solved. (See also Appendix II Table 8).

The rate of internal use of library materials obviously affects the amount of use the study space in the library receives. Likewise the suitability of the latter will affect the internal use ratios. If users make heavy use of library premises it is reasonable to suppose they will also make heavier internal use of library materials, than is the case if inadequate seating accommodation or other factors prevent them from working in the library. There is some evidence to suggest that, when library seating increases or library facilities in general improve there is a fall in issues. This could be because there has been a corresponding increase in internal use. If this is the case there is good reason for making such improvements, as we have seen how much more efficient, in terms of reader success, such internal use of materials can be.

College A	No. of seats	No. of issues	No. of students
1966-67	80	33,804	1,260
1967-68	240	32,385	1,400

17. Rate of Library Use

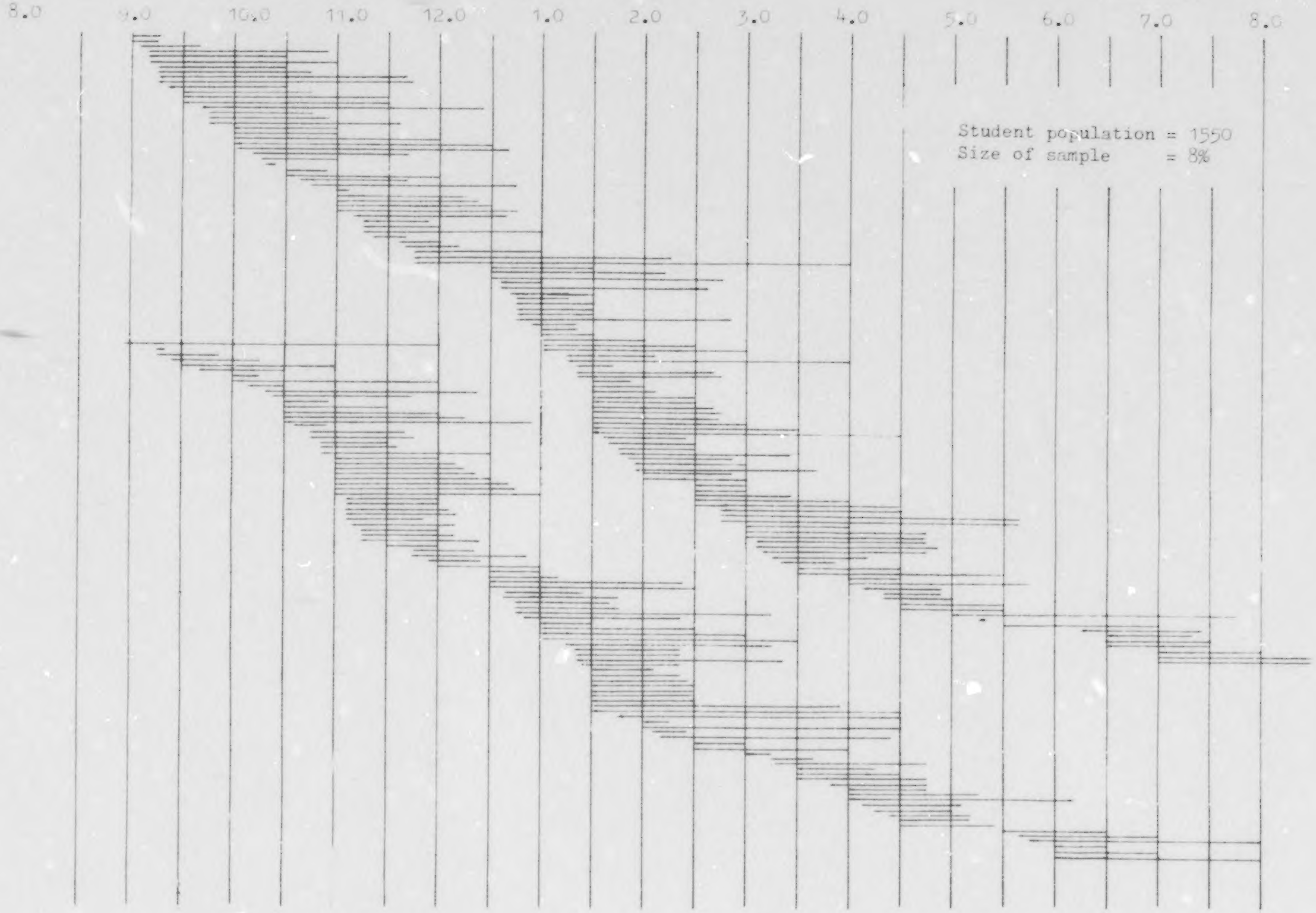
Figures can be obtained for the number of people entering and/or leaving the library which give an overall picture of use and also some idea of those times of day when the library was very busy or very empty. At College A this was done by a counter operated by turnstile at the library exit; a hand counter being used to count people who came to the desk to return books but did not enter the library. The results, read at hourly intervals for six days are shown diagrammatically in Table 11 . The day with the lowest use throughout was Wednesday, which is Sports and Committees afternoon. Otherwise it is interesting to note that peaks of library use seem fairly consistent, being at their highest in mid morning and end of afternoon, and their lowest at lunch time. On most days evening use is rather less but the exception on Thursday is noticeable. At College G there are mid-morning and lunch hour peaks.

At College G also counts of people using the library were taken from the turnstile, and the weekly results can be compared with weekly results at College A.

	College A	College G
Average weekly use Term Time	4156	2788
Total Christmas Vacation use	201	175
Range of daily Term Time use	270 - 1495	-
Average Saturday use (during T.P. only)	30	-
College population	1700	800

From the Survey of Use diaries it was possible to find out when a sample of people entered, how long they stayed and when they left the library.

TABLE 12.1 — NEEDLE CHART showing one week's library use — COLLEGE A



Student population = 1550
Size of sample = 8%

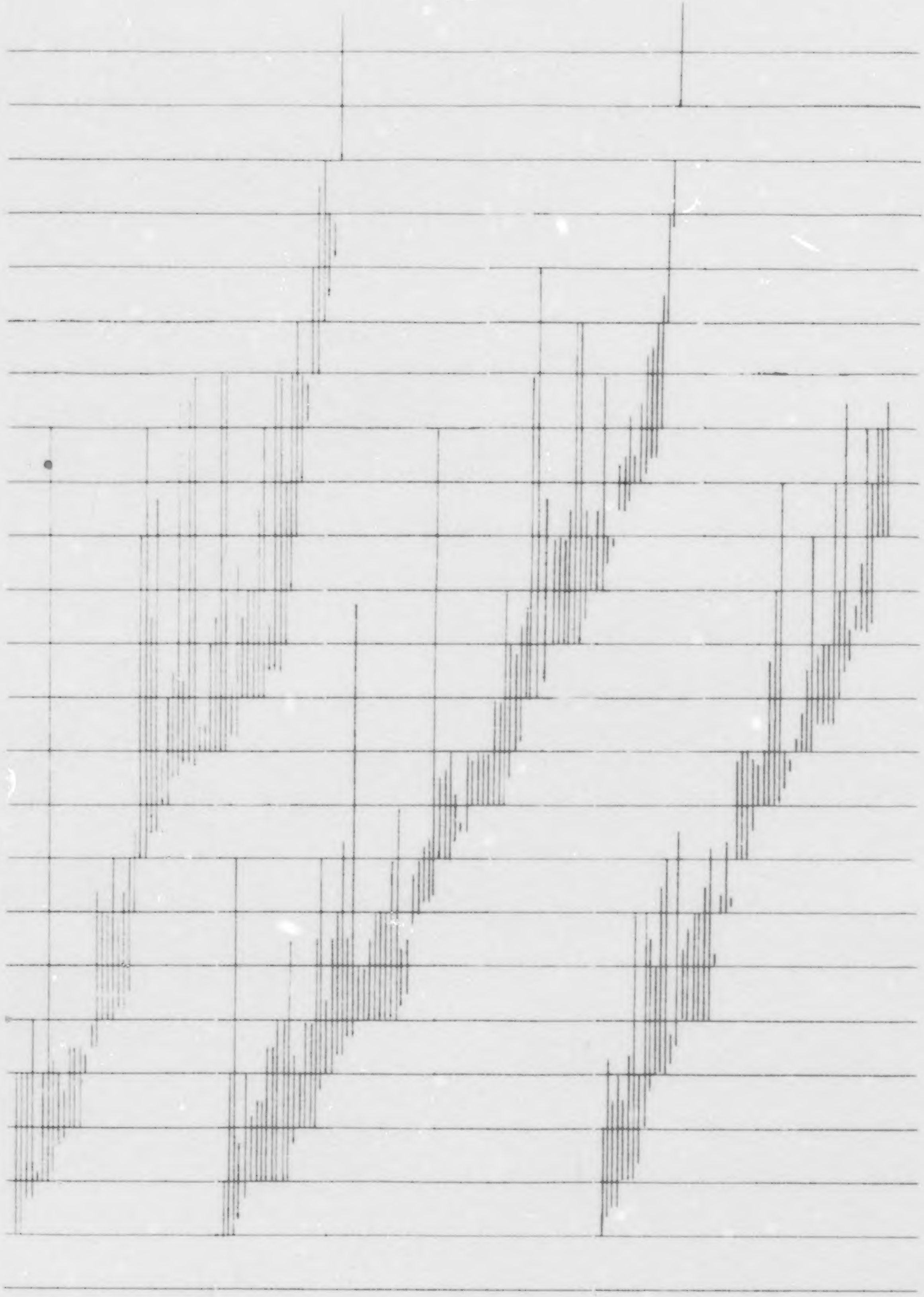
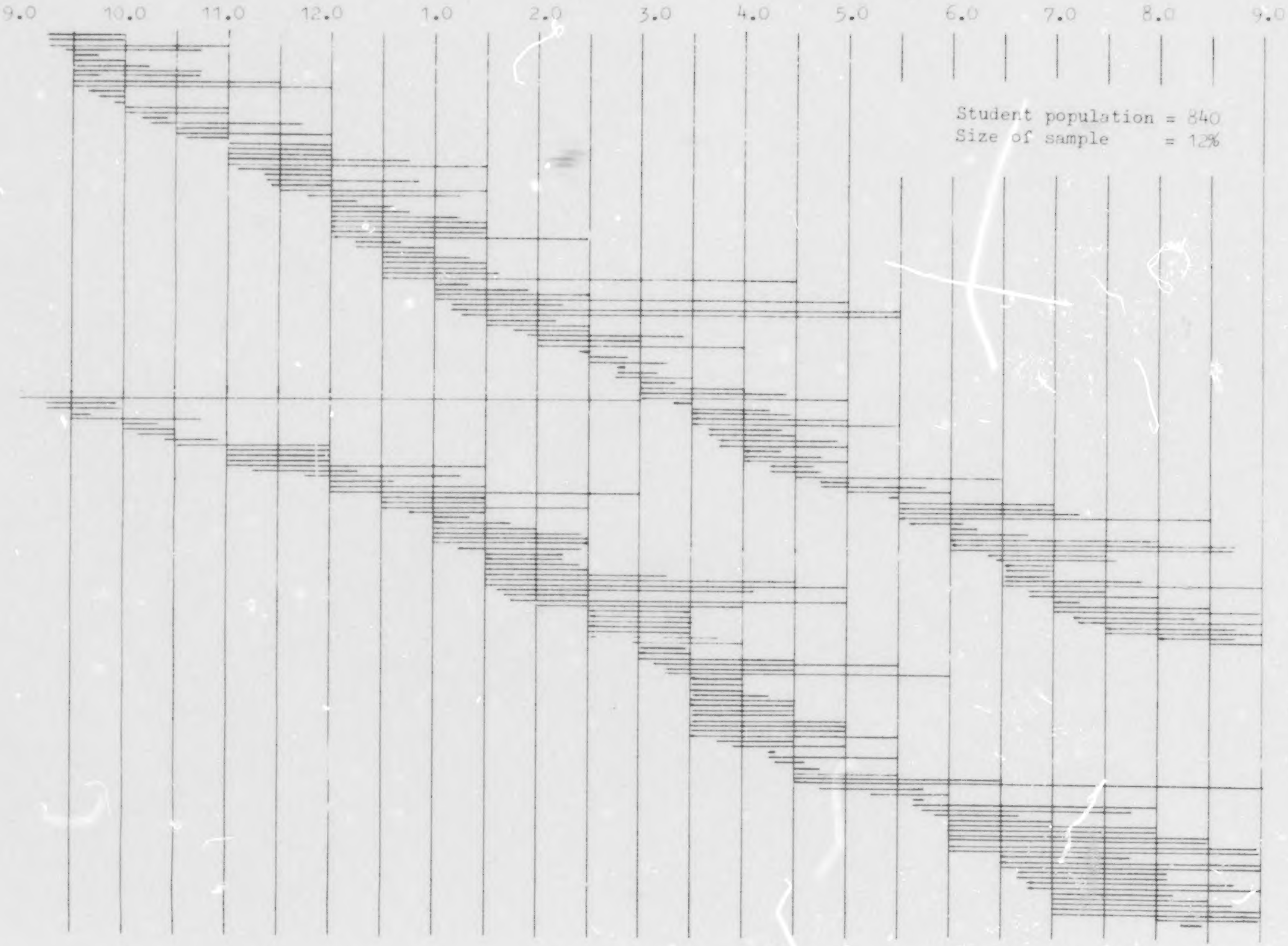


TABLE 12.2 NEEDLE CHART showing one week's library use COLLEGE D



Student population = 840
Size of sample = 12%

These Pages were
~~THIS PAGE WAS~~ MISSING FROM THE DOCUMENT THAT WAS SUBMITTED TO ERIC DOCUMENT REPRODUCTION SERVICE.

71 - 73

Many libraries have other sequences, notably for over-sized materials. These can create a problem since students often do not remember to check more than the one sequence. The issue slip survey at College A showed that only about 2% of Main Library issues were from the over-size collection, although this represents 10% of the total stock. The collection is housed in a different room from most of the stock. The over-size issues of school services stock were, however, about 9% of total and represent about 9% of the stock. They are housed in the same room. Materials kept in the stack sequence are also believed to be often overlooked by readers.

19. Subject Failure

Apart from use of particular titles and library space, students also often search for items on particular subjects. This practice is likely to increase as assessments are based more on assignments and students are encouraged to complete their own special subject topics rather than work to standard book lists. Although the failure survey was principally designed to investigate title failure, students were asked to indicate when they had failed to find items on a specific subject. 1.9% , 2.4% and 9.7% of students recorded such failure at Colleges A, B and C respectively. At College A, four of the ten subjects indicated as having failed were listed in the subject index, and were listed under alternative headings. Only one was not in the index and for all but this last case there was relevant material on the shelves at the time. However, the problem of subject failure is more complex than this and much of it undoubtedly was not recorded during the failure survey. Only College C make a positive effort to encourage students to record such failures, and the librarian went to great pains to deal personally with each student so doing. She described her system and the results as follows:

> "Throughout the period of the survey, the necessary follow-up and communication with readers was carried on as with normal reservations, but the amount of this was greatly increased since we advised all readers failing in category 5 (books on the shelf); all subject failures; and we treated all category 3 failures (not in stock) as potential purchases and/or interloans, where a reservation had been made by the reader failing.
>
> In effect we were running a postal bibliographical service of advice to all readers who had 'written' to us by way of the failure slip. Since we don't have a regular readers' advice desk in the library - readers have to knobble library staff to get help - this was an additional systematic service that we were giving throughout the time of the survey. Though one cannot be certain that people filling in failure slips would have made known their needs verbally otherwise, it's a fair guess to say that all the subject failures are for readers who would not have told us about their failure - there was after all nothing to stop them doing so during the period of the survey, and had they done so, many would not have failed."

Analysis of the subject failures gave the following results:

> "We have 48 slips which were codified by us as subject failures though some of these might perhaps have been treated as disguised book failures. However, because there was such a large number of these, it is possible to comment on them within categories as:
>
> a) 18 represented failure to find books on a particular subject where in fact there were books to be had. The readers had also used a subject heading which the subject index to the catalogue uses, though not always in the precise order of terms.
>
> b) 12 represented failure to find information within the literature we do have, though a bit of perseverance would have been required to reveal it; i.e. information in excyclopaedias, in periodical articles via the printed indexes, in collected essays or works.
>
> c) 8 represented failure to find subject matter because all book material that the library had on it was on loan.
>
> d) 10 represented failure to find subject matter because the library did not in fact have any on the topic. Of these, 8 were highly specialised requests: adaptive radiation in coleopters being an example; the remaining two were for the kinds of thing the library does not normally stock: dramatic sketches, a collection of (see the Drama department's face if we did!), and a general practical woodworking book."

At College A, the second intensive failure survey questionnaire was administered by interview. As a result of this questioning it was discovered that many students who had found material during a subject search, and therefore could not be said to have failed in the strict sense, none the less stated that the items they had found were inadequate, unsuitable or insufficient. A different type of failure survey carried out amongst undergraduates at a new university* included a specific place to record subject failures. Students were asked to indicate both what they had been looking for and how far they had been successful. A quarter of the total searchers were looking for material on a subject. A quarter of these found something directly relevant, a half found something moderately useful, and a quarter nothing at all. Over half those looking for specific items failed to find them.

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*private communication.

There is apparently urgent need to investigate more completely the way students carry out subject searches, and to ascertain how far their failure is due to lack of knowledge of suitable searching techniques and how far it reflects inadequate library stocks. We have already noted the phenomenon of "collection bias" and it is likely that often the same titles which are in heavy individual demand and often fail because on loan would also fulfil many of the unsuccessful subject searches.

20. Readers' Advice

It has already been noted that some subject failures were apparently due to readers failing to find materials which were on the shelves. Sometimes it is hard to find the reason for this failure, since the book was in the normal place and they appeared to have correct details for it. On other occasions, it was due to failure to check all the sequences. The two week restricted loan sequence at College B was particularly frequently overlooked (See Table 10 in Section 14).

21. Use of the Catalogue

Much of this failure apparently arises at the catalogue. Many users had incorrect classification number on their failure slips, or none at all, this latter suggesting they had not checked the catalogue at all. Others had apparently overlooked symbols indicating specific sequences, or, at College A had not understood the significance of the temporary 'order' cards placed in the catalogue while books were being processed.

TABLE 13

Failures arising from non use or misinterpretation of the catalogue

	College A
	100
	(90)
Wrong class number	21
Special group letters ignored	10
Oversize symbol ignored	6.6
Title unknown	1.1
Wrong author/title	15.5
Class number unknown - but book available	15.5
Class number unknown - but book not available	30

At College A students were asked during a period of six days, to indicate on a diary the activities they had carried out during their visits to the library. 19% of the users indicated that they had used the catalogue. The first three years used it less than did the fourth years and the staff.

Year 1	Year 2	Year 3	Year 4	Staff
%	%	%	%	%
17	16	17	23	28

22. Catalogue Survey

College A was one of the libraries selected by the Cataloguing and Indexing group of the Library Association for the Catalogue use study. Here books are classified mostly by the Dewey 17th. edition, but a special version of the London Education Classification is used for the education reference books. There are, thus, two classified catalogues each with its separate alphabetical index, the school services subject catalogue being housed in the separate room where the books are. All books, wherever shelved, are included under author in the Name catalogue. There are also many added subject entries filed in the classified catalogue. On average three entries are made for every title.

According to the survey 17% of the readers never use the catalogue, 5% because they found it too difficult and 8% because they said they could manage without it! Of the remainder 32% maintained they used it weekly and 36% that they used it monthly. Only 10% said they used it more than weekly. There was no difference in regularity of library use between the users and non users of the catalogue. The most common entry point into the catalogue was by author. 84% of users did this as against 42% by title and 41% by subject. Some obviously use more than one type of entry. Likewise 88% of users found the author catalogue easy to use and only 4% expressly stated it was difficult. Yet only 56% found the Classified catalogue and only 60% the subject index easy. 29% and 22% respectively found them difficult. It is strange that more people found it easy than said they used it and the number of people having difficulties in this area is probably greater. Many readers use the subject index as a guide to the shelves, rather than as a guide to the catalogue. It is probable that many people also think they can use this part of the catalogue yet often, in fact, make mistakes, if we bear in mind the sorts of reader failure of the catalogue referred to earlier.

The problems involved in sbubject searching are particularly important. This library incorporated an extra question on subject searches into the catalogue use survey. From this it emerged that 59% sometimes attempt to find subject material with the following success rate:

Never %	Rarely %	Sometimes %	Often %	Always %
0	6	51	43	0

The results confirm that more guidance is needed in this area.

23. The concept of failure

We have frequehtly in this part of the report, discussed users' failure, for whatever reason to find items in the library. We have seen that much of this is due to books being on loan and quite a large proportion is due to the readers' difficulties in coping with the mechanics of libraries. A variable amount is also due to the library not having the material sought in stock and we shall consider this in the following sections. The intensive failure survey gave a suggested figure for failure rate - based on the number of items people stated they had found in relation to those for which they were looking. The results were as follows:

College	A		B	C	G
	1	2			
	42%	44%	21%	41%	33%

These figures do not, of course, include subject failures and could, therefore, be an underestimate. What we must consider, therefore, is what these figures mean. Firstly, how serious is a high failure rate? It must be realised that the more successful a library the greater the demands that will be made on it and the higher the expectations people will have of it. In these cases failure is more likely to occur. A low failure rate could be indicative of an underused and unsuccessful library whose stock rarely matched up to the readers' needs, and whose readers therefore had stopped using it. There is a need here to investigate not only the library users, but also the non-users in the community to find out why they do not use the service offered. On the other hand, a high failure rate suggests a considerable amount of reader frustration and the librarian will always try to improve this situation if possible, particularly in those cases where readers are failing, although the material is, in fact, available. We have called this 'Reader Failure', but it is also, in a sense, a library failure, a failure to guide the reader satisfactorily through the library, or perhaps a failure because the approaches havebeen made too complicated for the non-librarian to be likely to come to terms with. Some of the problems, such as m ultiple sequences, are forced on the librarian by building inadequacies, others, such as confusing cataloguing and classification guidance and systems, by lack of staff time. The librarian at College A reported that one of the problems of college library work was the lack of intellectual curiosity in some students, their poor motivation towards successful study and their lack of clear professional ambition. Lomax* in his research also notes the limited range of interests, and the short time devoted to study outside lectures and tutorials. Such attitudes, however caused, obviously lead to reduced and unsuccessful use of learning resources.

In order to set this matter in perspective, however, it is reasonable to ask how serious failure was to the reader. In the intensive failure survey readers were asked about this.

TABLE 14 EFFECT READERS CLAIMED FAILURE WOULD HAVE ON THEIR WORK

College	A		B	C	G
	1	2			
	100	100	100	100	100
	(69)	(81)	(47)	(23)	(60)
No indication	17.4	27.2	12.8	26.1	28.3
No effect	11.6	7.4	4.2	8.7	11.7
Delaying, slight effect	49.3	58.0	48.7	43.5	26.7
Important effect	21.7	7.4	34.0	21.7	33.3

N.B. These figures include only those who actually failed on that visit.

From this table it can be seen that on average less than one third of the failures were serious, although one half would, in most cases have some delaying effect on their work.

This confirms Slater and Fisher's findings that undergraduates tend to be badly organised searchers for material in libraries, and that they are less disturbed by delays in obtaining materials than other types of user.

It is also worth considering how often failure slips for items were put in although that reader had been adequately successful in finding other materials on those visits. This could be for two reasons. Many students enter the library with a list of e.g. 5 books of which they find perhaps 2, they may then record the other three as failures, although in fact they had only intended to use say two of the five on the list for study purposes. A similar example occurred at College C where one student recorded several failures for items he had obtained from a bibliography but the librarian states that the reader who "went to all this trouble to fail wasn't at all put out by failing! He found a good many of the titles on his list and felt quite pleased". The other way in which failure may be mitigated is by substitution. Students were asked to indicate this on their questionnaire. The results were:

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* Lomax, D. Focus on Student teachers. Higher Education Review, Vol.3No.1 Autum 1970. p. 36 - 52.

College	A 1	A 2	B	C	G
Substitution rate	14%	20%	69%	18%	32%

Thus adequate substitutes are found for one seventh to two thirds of the items failing.

24. Acquiring New Items

In most college of education libraries, apparently, the number of items which fail because they are not in stock is fairly small, although at College B it was as much as 25%. However, it is reasonable to include in this category items which failed because they were in process. This was considered to be a type of reader failure at College A because 'order' cards are placed in the catalogue as soon as a book is accessioned, to indicate that it is available if needed. However, many items "not in stock" may have been selected and/or ordered, but may not have arrived. From the readers' point of view whether the items have been ordered or not makes little difference. Yet it may make considerable difference in the length of time he will have to wait should he choose to make a reservation for it. A book already in stock and awaiting processing can be provided almost immediately. One on order will arrive, in its own good time, but one not yet selected will be very slow in coming. The library has first to decide whether to purchase or borrow through ILL. (See Section 25). In either case the process of acquiring the item may take several months.

Pilot investigations took place in seven colleges to ascertain how long books took to reach the shelves after they had been selected. Records were kept for 25 randomly chosen books in each college. In no case had all 25 books reached the shelf when analysis was completed in December 1972. Since all the items still in the system will have taken longer than those which are included in the analysis, all the average figures given are underestimates of the true time taken and the upper end of all ranges will be even greater.

College	No. of books reaching the shelf	Average time taken in weeks	Range of time taken in weeks
A	15	47	26 - 78
B	19	12	6 - 18
C	19	17	7 - 23
D	17	14	2 - 23
E*	14	22	14 - 24
F	18	9	2 - 13
H	20	14	8 - 26

* 6 further items were at cataloguing stage at the end of 24 weeks.

Quite large proportions of this time are outside the libraries' control since material is often slow arriving from the supplier. In some cases libraries also do not order the material immediately the item selected has been approved, either because that department has already spent its allocation and, therefore, the order must wait till next year, or because the library's backlog of materials is so great that a conscious decision is taken not to add to it, or simply becauseorders have accumulated faster than the librarian can process them. A breakdown into time spent at each stage at College A gave the following results.

Time between approval of order and making of order		Time between making of order and arrival of book	
Average	Range	Average	Range
6 weeks	1-26 weeks	14 weeks	12-28 weeks

Time between receipt of book and reaching the shelf	
Average	Range
24 weeks	9-44 weeks

It is apparent, therefore, that it can take, in some libraries, on average nearly a year for selected items to reach the library shelves, and although as much as half of this time is beyond the librarian's control, the time taken to process items is still often considerable. At College A there is some compensation made for the slow processing of items since readers can obtain books which are physically in the library, but not yet "in stock", via a temporary card indicating this which is filed in the catalogue when the book is accessioned. At College G the history of ten books about to be shelved was studied, and it was found that they took about ten weeks to reach the shelves after being ordered. The range being 3 - 12 weeks, 32% of this time was spent on physical processing and 27% was time between ordering and arrival. College A allows a speedier order channel for urgent items which are ordered direct from book shops and processed immediately on arrival. Also lecturers are invited to identify books urgently wanted from those awaiting processing, and these also can be finished off in a few days. Similar systems operate elsewhere.

Long delays in getting books onto the shelf are serious at three levels. Firstly, if the staff have requested the book they presumably consider it necessary for an ongoing or commencing course and it should be available for students to use. Secondly and more urgently, specific demand for the item is thwarted, thirdly, since the useful life of main library books is about ten years and of School Services books only 5-6 years a large proportion of their most useful period, which is usually immediately after publication is lost. Considering the cost of this material the situation is both economically and educationally unsound. It can only be rectified by adequate staff time for the task, since backlogs are bound to occur if staff are constantly occupied with activities which cannot be postponed, such as issuing materials. (See Part IV, Sections 35 - 68). This loss of useful library life needs costing.

25. Interloans.

We have already referred to the number of failures caused by items not in stock, and have seen how long it can take to acquire and prepare new books for use. A library must, therefore, back up its service by borrowing from other libraries. The extent to which this is done depends on the geographical situation of the library and the extent to which users require specialist material which would not normally be within the libraries' own range of stock. The librarian at College C has stated her policy as regards interloans as follows:-

I find it a paradox that where one aims for bibliographical self-sufficiency in terms of range one cannot hope to achieve it in terms of supply! That is in the literature of education, where one is buying most comprehensively yet can never hope to meet the demand.

"On the other hand in some subject areas where one's aim is not necessarily comprehensiveness, e.g. music or archaeology one can achieve self-sufficiency by dint of tailor-made selection for limited readership. The interloan services are rarely used for material in music, or art or drama or literature for that matter for where the demand occurs I meet it by purchase."

"The variables affecting decisions to buy, interborrow, acquire photocopies, direct readers to another source:

"Each demand is a special case, and time scale enters into this to a very large extent. If an item is available and there is no hurry we buy; if it is urgently needed, local interloan is quickest (telephone and internal courier services), national interloan, especially NLL next.

Journal articles introduce the cost element most obviously and the charge for Xerox copies payable by the reader becomes one of the chief considerations. So if a number of articles are needed and they can be located in the Polytechnic (best local source), or the University (next best), the reader is directed personally to these sources as the most economic for him. "

" Specialist items in education and psychology I would pretty automatically borrow from or through the School of Education, then make a decision to buy for ourselves those that would seem to merit this by usefulness. So we don't bleed the School of Education even though we may borrow a lot of things from them once! "

Elsewhere the proximity of large central public libraries often eliminates the need to acquire items on interloan, since it is quicker and more efficient for the students to visit the library concerned in person. The extent to which this is a solution is also affected by the extent to which local school of education and university libraries allow access to their stock by members of the college. (See Part V A Sections 8 to 8.2).

In colleges where courses are assignment based, where many students are doing B.Ed. or where there are many mature and highly motivated students with wider than usual subject interests and experience, there is likely to be a greater need for interloan or special materials which the college library cannot hope to stock.

Interloan items as a proportion of total issues are as follows for the eight sample colleges:-

A	B	C	D	E	F	G	H
%	%	%	%	%	%	%	%
.3	9	.4	.1	.1	1	.5	.2

There is very little difference between these proportions with the exception of that for College B. The librarian at this college states that 2½ academic hours per day are spent on interloans work. Half these requests were for periodicals and they represented 80% of all periodicals asked for or reserved. Of the remainder 7% were for theses. Books and theses obtained on interloan represented one third of those asked for by users. The total number of items sought through ILL during the year in question was 1807. The use of reservations at this college was also much more than elsewhere (see Section 13). Many libraries do not openly advertise interloan services to students because they have not the staff time to deal with the increased work which may result. If, in future, because of changes in students' needs, it becomes increasingly necessary to do so, a workload similar to College B's may result. Other libraries whose colleges have changed from examination to assignment-based work have already noted an increase. Another college which counted one week's interloans found it issued 50 (40 to students, 10 to staff); if this is a regular figure it would imply annual interloans of 1700 or 4% of issues.

Analysis of interloans at Colleges F and G give a picture of the type of library chiefly used by these colleges of education

	College F %	College G %
NCL	-	14
NLL	49	13
Local P.L. chiefly used	35	31
School or Inst.of Ed.	8	15
University	-	15
Others	8 *	12

* made up of loans from 17 libraries.

College A, where local public and Institute libraries are within easy personal travelling distance for students, nearly always uses NCL and NLL. The former is mainly used for staff requests as its service is too slow for students for whom periodicals are increasingly obtained from NLL. The librarian states, "The speed and success of NLL will, in my view, lead to a reconsideration of which periodicals college libraries should buy and which bind. Many back numbers are too little used to earn shelf space in many different college libraries."

It is felt that few if any compensating financial gains are made by borrowing rather than buying since the materials involved are usually of a quite distinct nature, i.e. a librarian would not borrow items which he should have in stock. The costs of interloan are high and the process often slow. This is a matter which the British Library will be investigating.

26. Use of Periodicals

It has been noted that one librarian finds that his back numbers of periodicals are under used. There is a general feeling amongst librarians that journals do not receive sufficient attention from readers. In some libraries some sort of indexing is carried out in order to bring the material to their attention. At College G, for example, a photocopied current contents service for staff is provided. At College E full subject indexing takes place; at College D monthly lists of selective periodical articles on subjects of interest are disseminated. At another college, selective indexing of topics known to be needed and not well covered by the book stock is carried out and cards are filed accordingly in the subject file of the library's dictionary catalogue. The college concerned has recently changed from examinations to assignment-based and special study work for most of its courses, and the librarian has recorded an increase in periodical use from 418 per term in 1969 to 1053 per term in 1970, and 1842 per term in 1971, a fourfold increase in two years. (For evidence of increased use at College E see Table 13). According to information on the six day diaries (See Section 21), 11% of the students at College A used periodicals during one week.

27. Growth of Library Business

All college libraries have experienced a growth in all types of use in the last few years. This is partly due to the inception of B.Ed. courses and the resultant improved library stocks, and partly to a change in teaching methods. The exponential growth in knowledge and increased awareness of periodical materials have also played a part, as has the expansion of services and demands on types of material other than books. It is also true that the more a service improves the more people will become aware of their need for it, and, therefore, the more demands will be made on it. Evidence for this can be seen in the increased use of reservation and ILL services in some colleges. As resource centres become more common and institutions become learning based rather than teaching establishments this is likely to continue. Tables 15 - 18 show the growth in the amount of library business for 4 colleges and Tables 19-24 show library business per student for all eight colleges, where statistics are available.

28. Conclusion

Most failure to find items by users is due to their being on loan to others. It is, therefore, necessary to achieve a compromise between allowing individuals to borrow as and when they would like, and heavily restricting loans. Many libraries limit the number of items each individual can borrow at any one time. However, some issue systems which do not rely on the leaving of a borrower's ticket every time a book is taken out make this system unworkable in practice. Long loan periods cut down staff work on overdues and renewals, but if, as is often the case, all books are due for return 'en bloc' at the beginning and/or end of terms, considerable peaking of library work will result. Where long loan periods exist a system of recall can help.

Differing loan periods to staff and students were operated at College A, with the result that of all items on loan which caused failure one in six were on loan to staff. Yet the ratio of staff:student issues in one year was 1:15. Therefore staff borrowing on a long loan period caused a disproportionate amount of failure to students. Shorter loan periods may be possible since many users always return books on or about the date they are due back, regardless of when they finish with them. However, this could increase overdues, and sending out overdues is a time consuming operation. If time could be saved it would enable a short loan system to be introduced but improved loan policies will result in much higher issues per annum, and therefore an increased workload. The restricted loan collection at College A was more heavily used than the main sequence. However, only about 30% of Restricted Loan books were unused in one year as compared to 42% of Main Library books. If books continue to be in heavy demand for long periods, the solution may lie in duplication, or purchase by students. Another answer, however, may be to change teaching methods to those which do not require large groups of students to read the same text at the same time. Although as the life of titles in some fast changing subject is now very short, many duplicate copies will prove of short term value only.

About 70% of Main Library books and 82% of School Practice books at College A were borrowed at least once in two years. Books of use for education and related subjects amount to approximately 31% of total main lending library issues. 33% of the annual issues are from School Services stock. It is likely that the

TABLE 15. COLLEGE A: GROWTH OF LIBRARY BUSINESS OVER SIX YEARS.

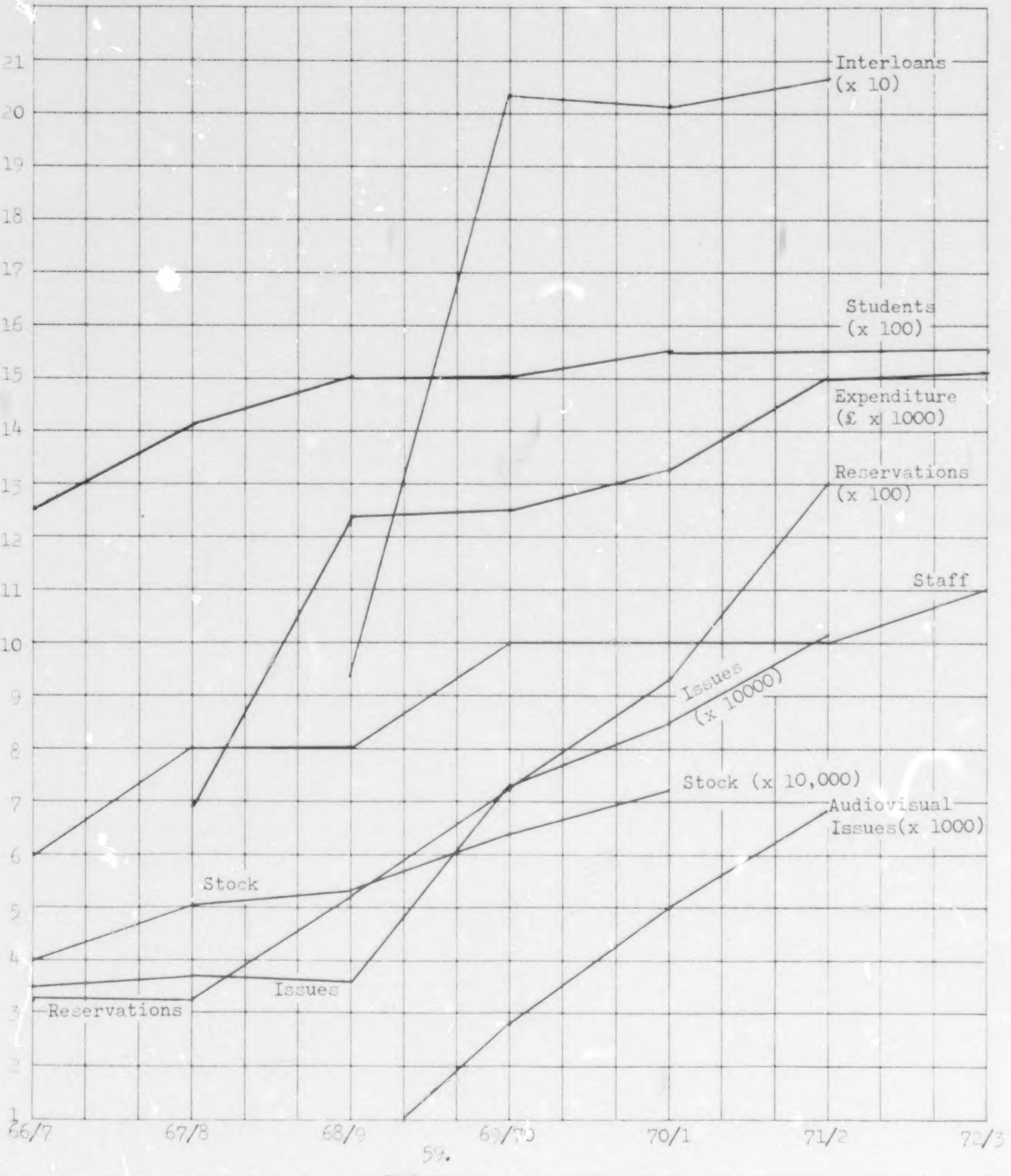


TABLE 16. COLLEGE E: GROWTH OF LIBRARY BUSINESS OVER SIX YEARS.

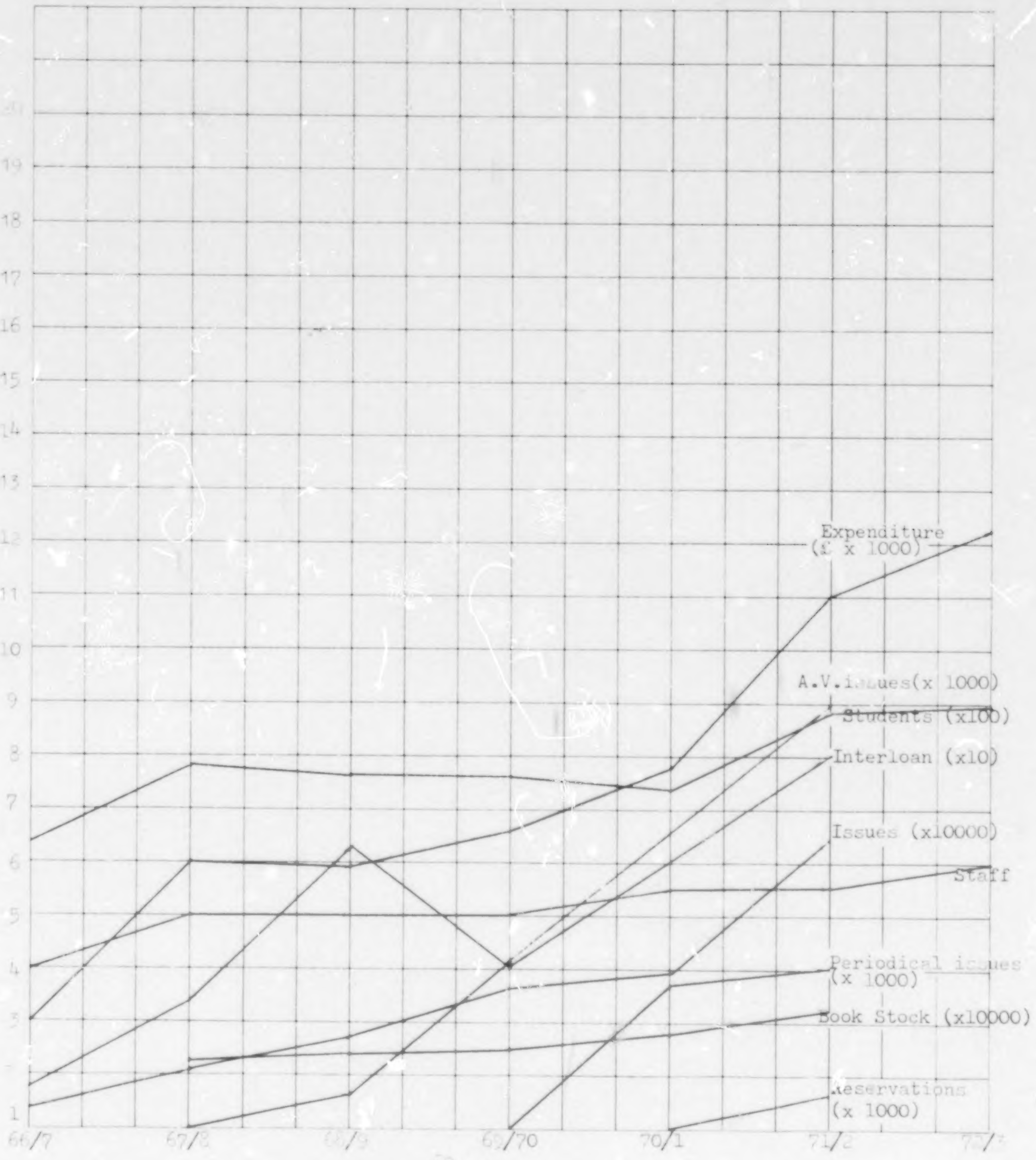


TABLE 17 **COLLEGE F:**

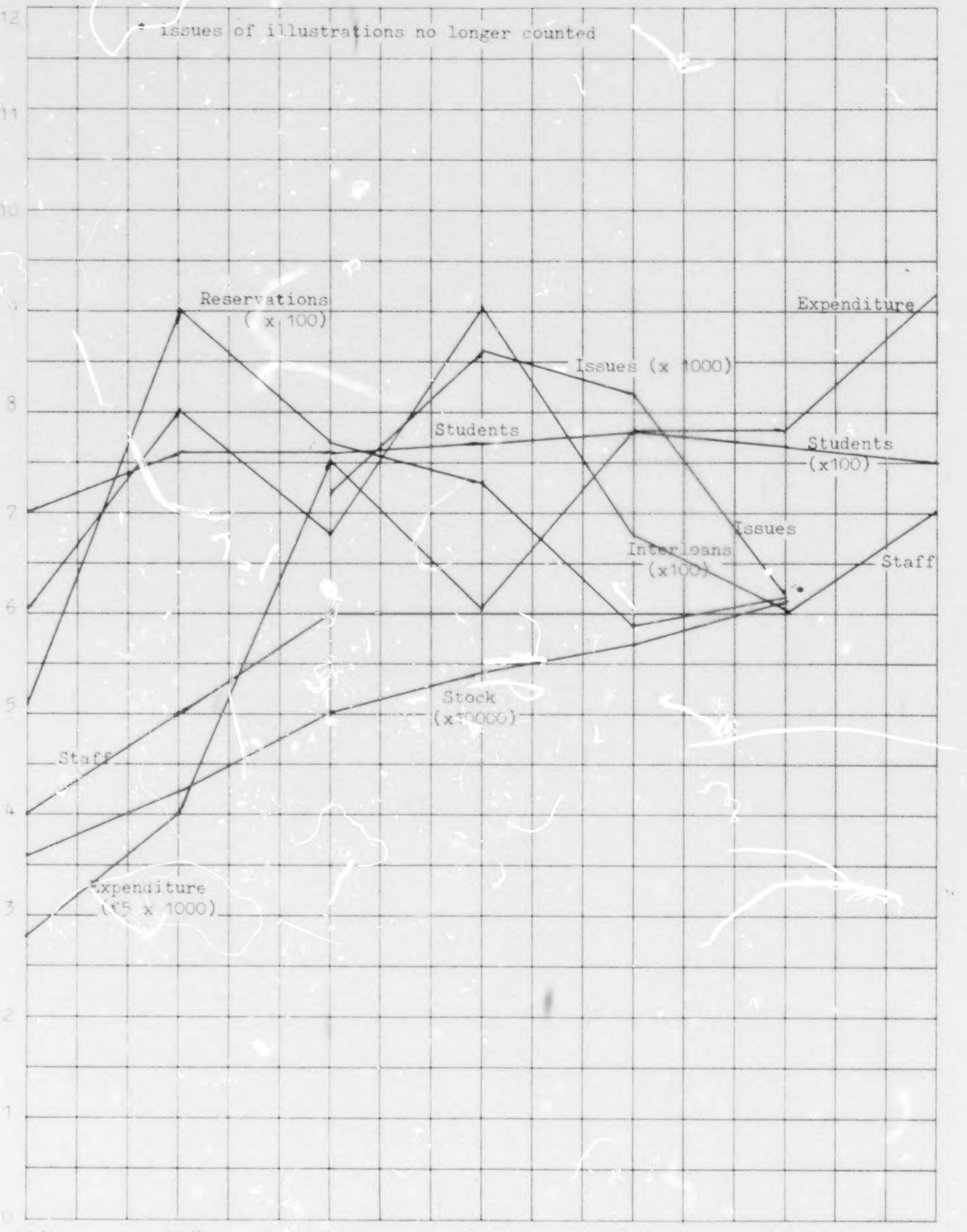


TABLE 18 COLLEGE G

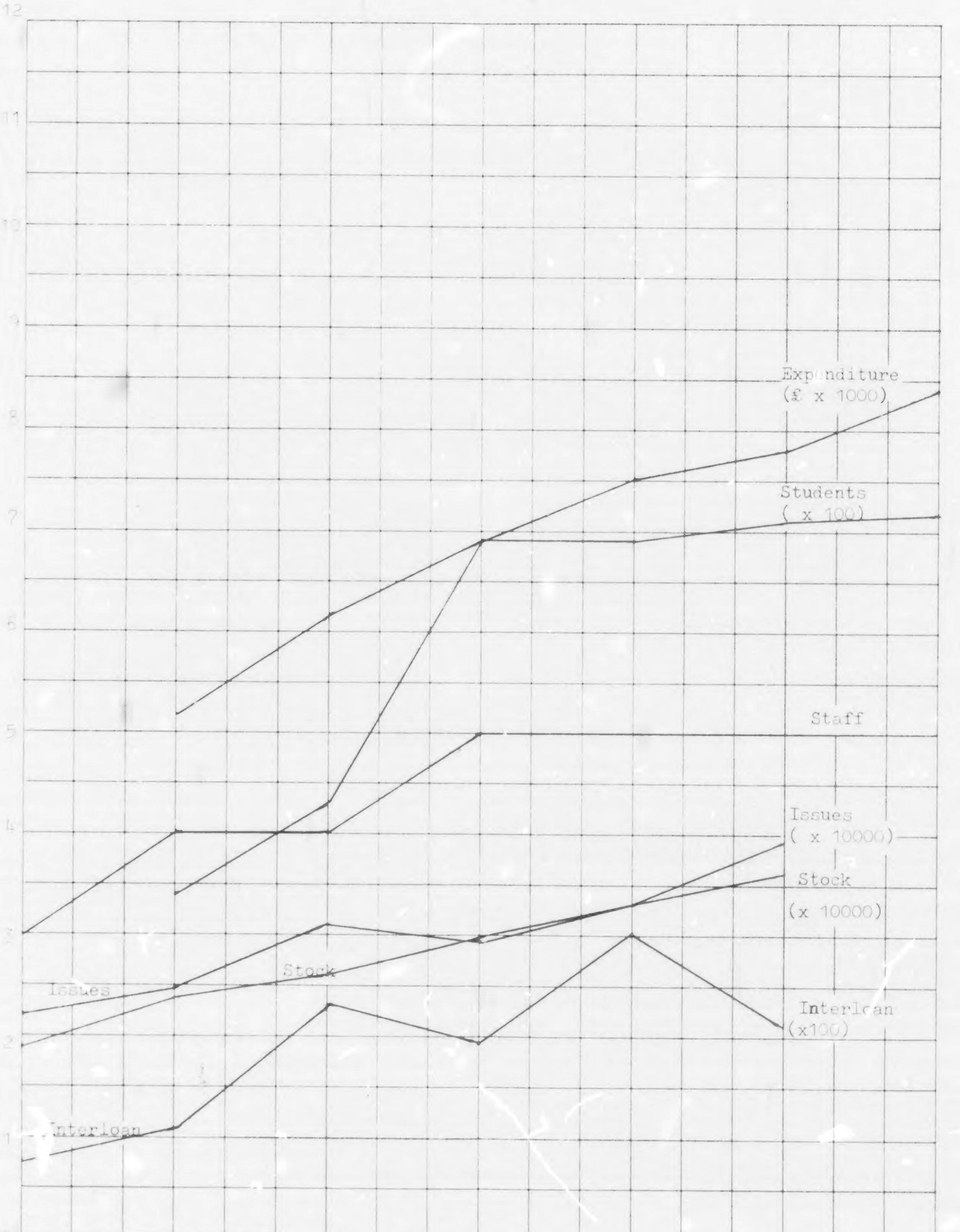


TABLE 19 Total Expenditure on library books per student for each of 7 years for 3 colleges, 6 years for 3 colleges, 5 years for 1 college and 4 years for 1 college.

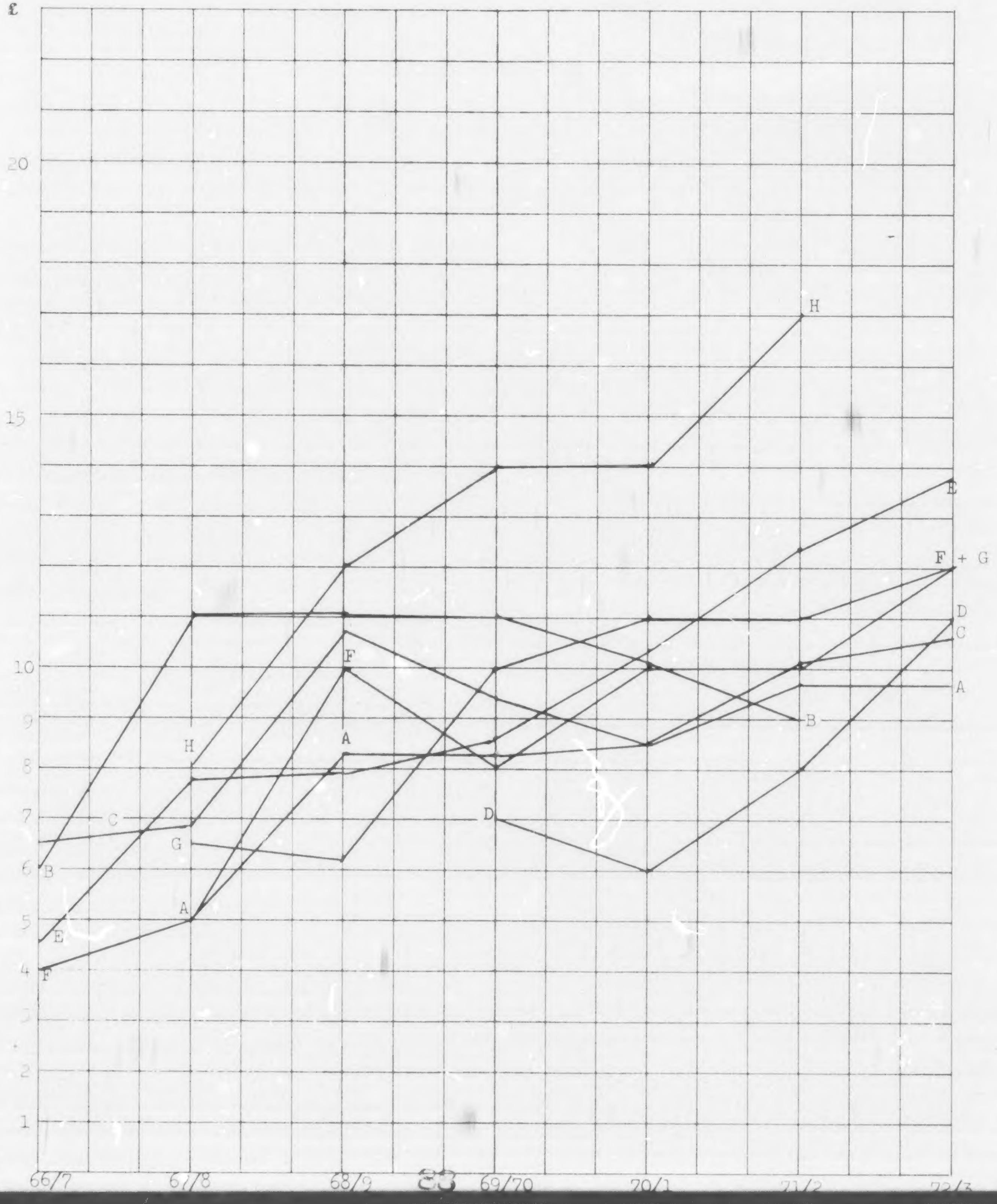


TABLE 20. Library book stock per student for each of 6 years for 4 colleges, and 5 years for 4 colleges.

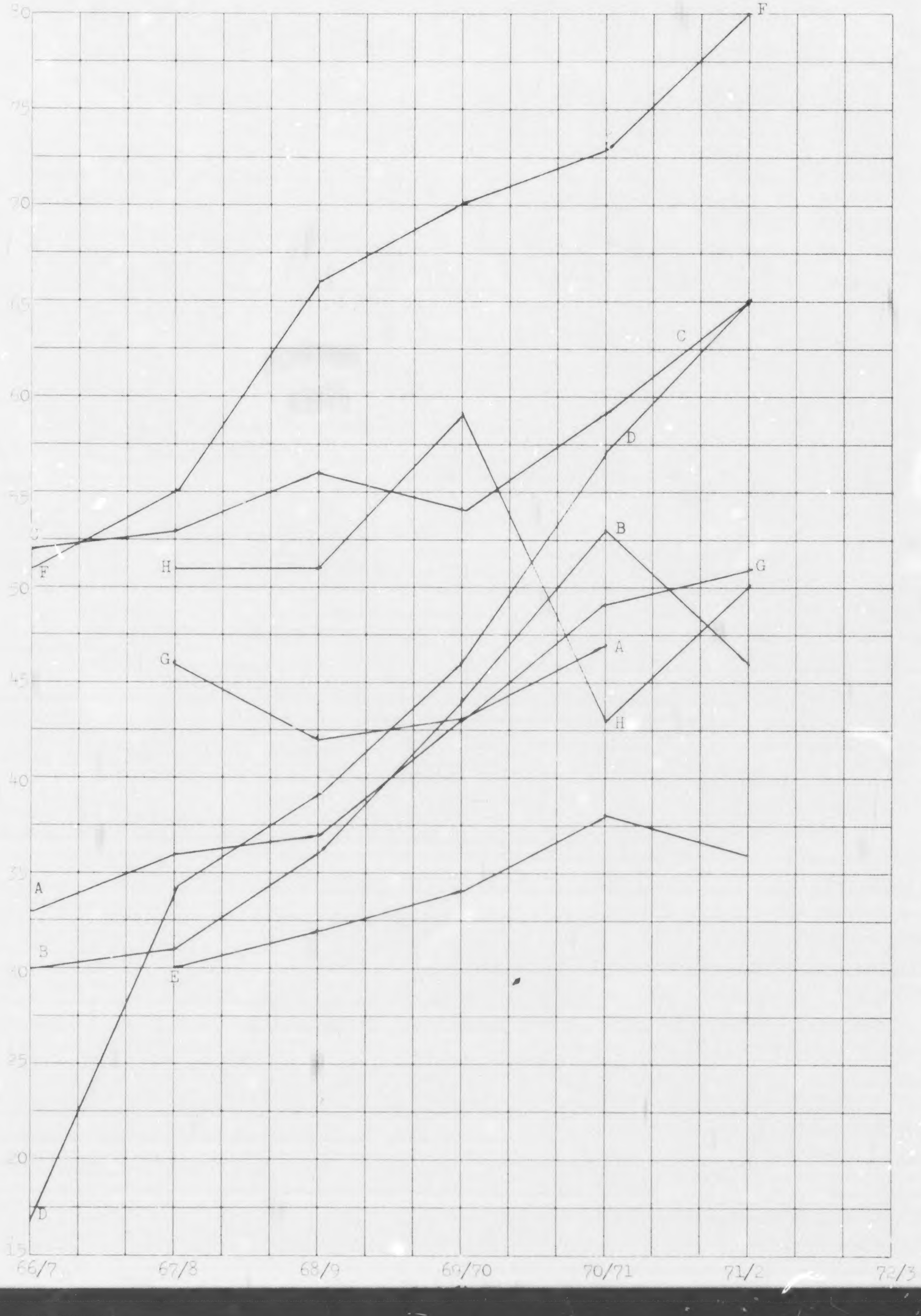


TABLE 21 Library fund* expenditure on Audiovisual materials per student for each of 7 years for 1 college, 6 years for 1 college, 5 years for 1 college, 4 years for 1 college, and 2 years for 1 college. Audiovisual stock per student for each of 2 years for 1 college. Present stock per student for other colleges is as follows:

* Many libraries also spend some other college funds on Audiovisual materials.

College	per student
A	9
C	0.8
D	6
E	13
F	17
G	6

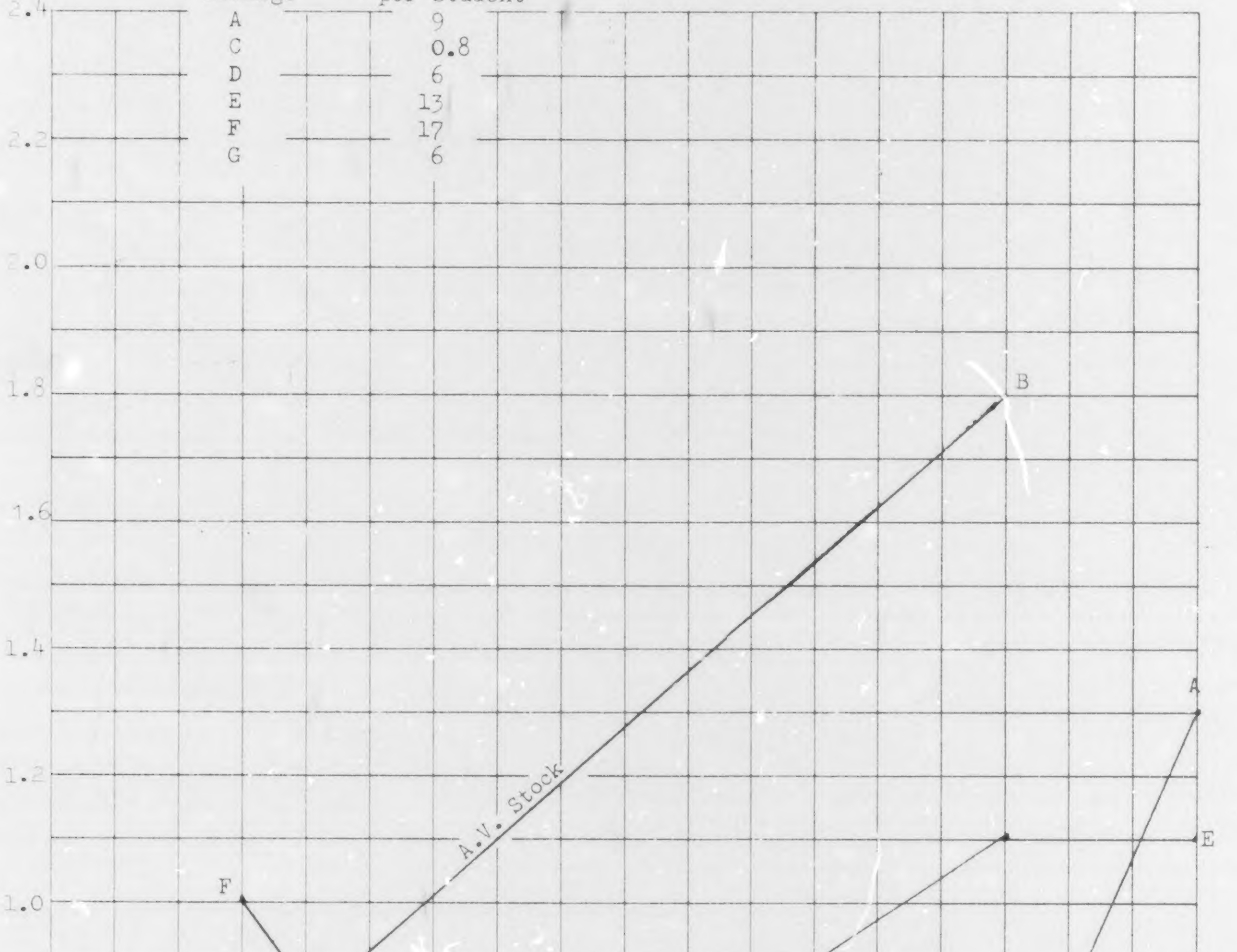


TABLE 22 Total issues per student for all types of material* during each 6 years for 3 colleges, 5 years for 2 colleges and 4 years for 1 college.

* College F 1971/2 issues do not include illustrations.

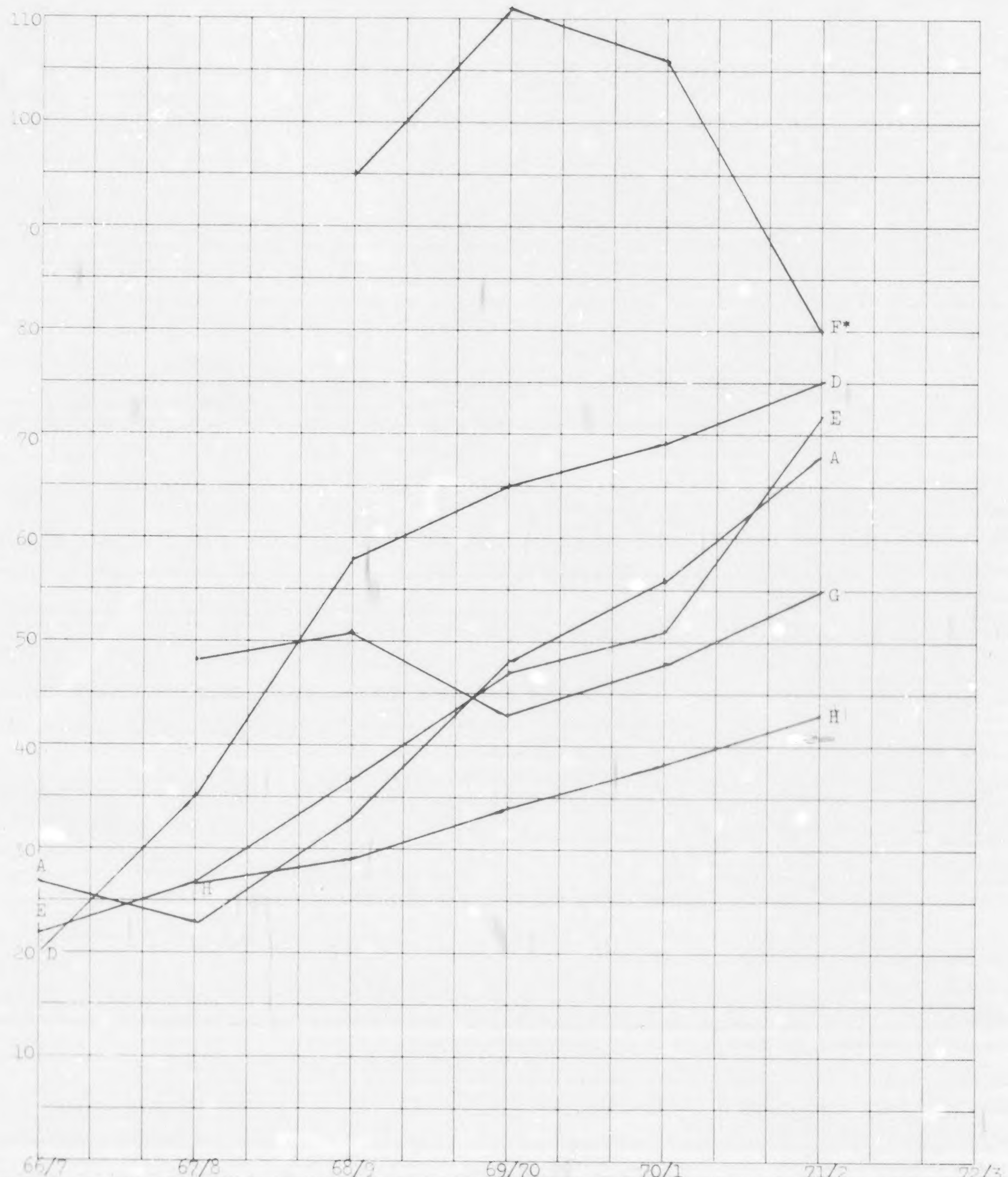


TABLE 23 Reservations made per student for each of 6 years for 2 colleges, and 2 years for 1 college.

Interloans made per student for each of 6 years for 2 colleges 5 years for 1 college, 4 years for 1 college, and 2 years for 1 college.

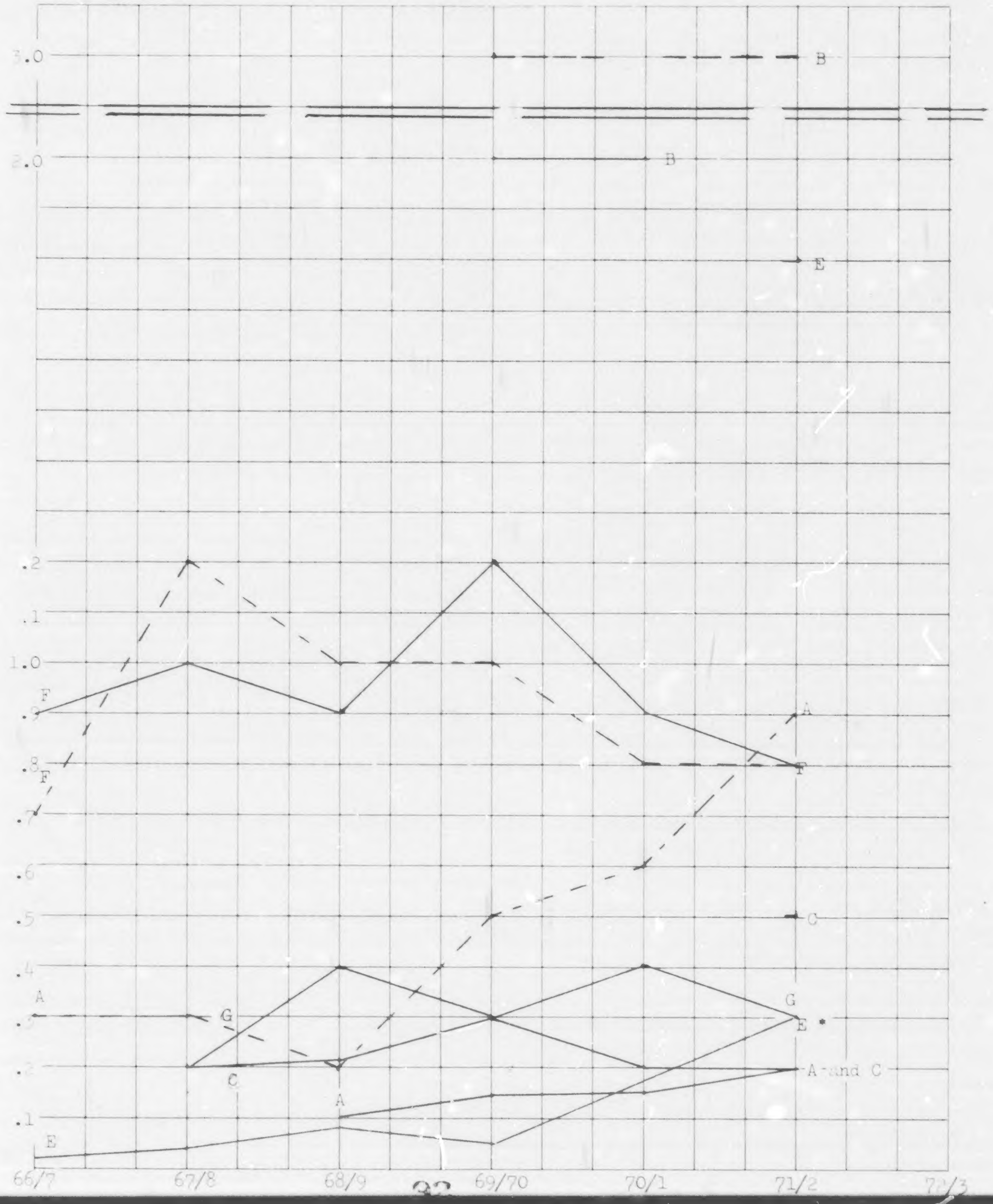
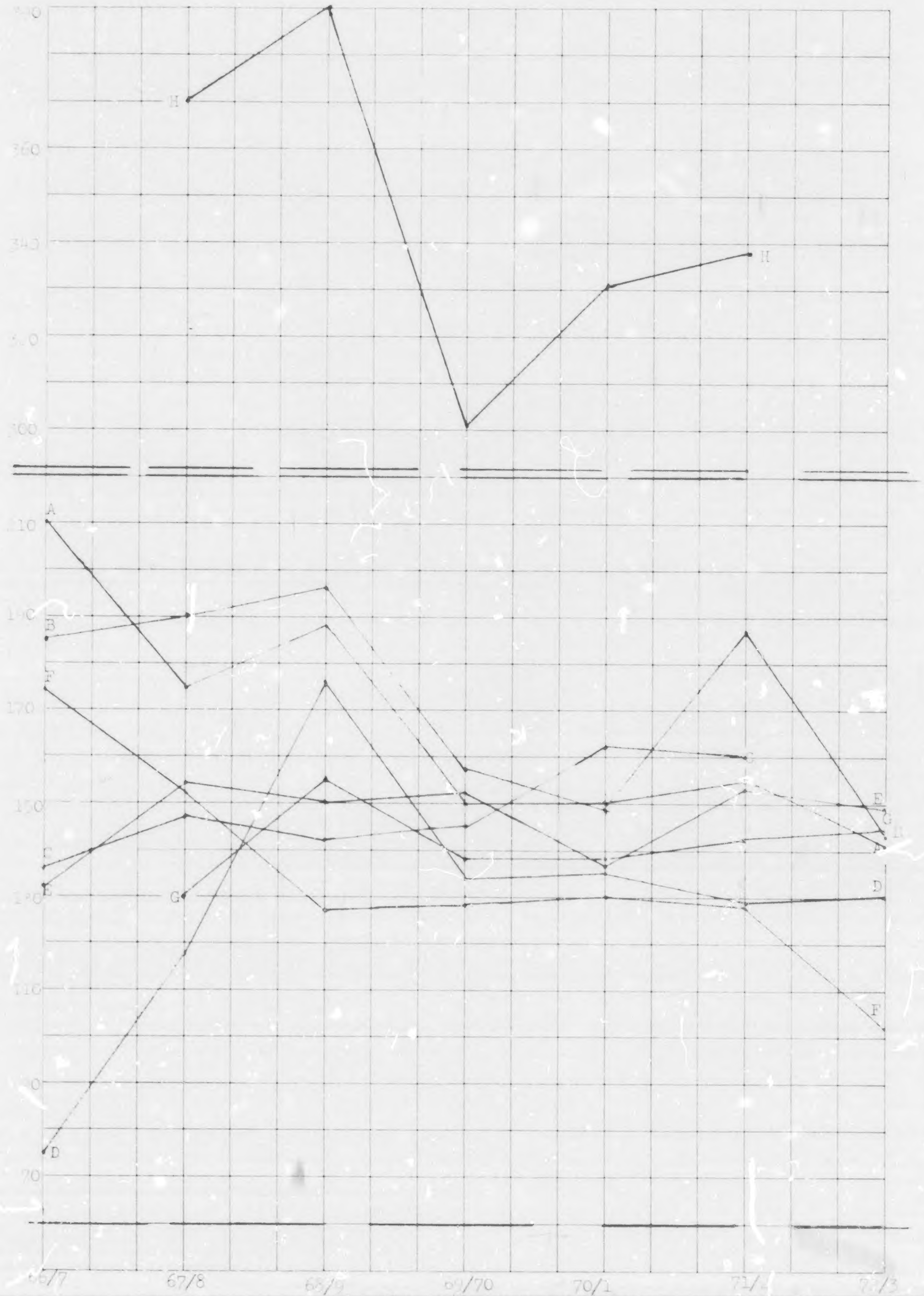


TABLE 24 Number of Students per member of Library Staff



intensively used areas of stock, i.e. Education, Psychology and Literature, are those where failures most often occur.

Making a reservation is rarely a very popular method of obtaining items not on the shelves. The major problems, apart from lack of awareness of the service, would seem to be the length of time it takes to put a required book into the reader's hands. It seems worthwhile for colleges who wish to streamline their reservation systems and increase their usefulness, to add to the reservation form a request for information on when the item is needed. It was found that use of the system increased if the librarian advertised it well and maintained liaison with the requesting reader, as was done at College C during the failure survey (see Section 19).

Only 0.5% to 1.3% of books failed because they were being used within the library, but many students who had found material during a subject search stated that the items they had found were inadequate or unsuitable. Multiple sequences also create problems since readers often do not remember to check more than the one sequence.

Many readers experience difficulties in using the catalogues, especially the subject catalogue. This leads to a high rate of subject search failure. Many of them had incorrect classification numbers on their failure slips, or none at all, this latter suggesting they had not checked the catalogue. 19% of the users surveyed by questionnaire indicated that they had used the catalogue, and according to a catalogue survey carried out by the Catalogue and Indexing Group of the Library Association, 17% of the readers never used the catalogue, 5% because they found it too difficult and 8% because they said they could manage without it. Only 10% said they used it more than once a week.

There are serious problems in making new materials available quickly. In some libraries it takes, on average, nearly a year for items to reach the library shelves. As much as half of this delay is beyond the librarian's control. This delay is serious at three levels. Firstly staff and students need these materials for on-going courses; secondly, useful booklife is short and thirdly, because unused books represent a financial loss.

The use of interloan services is likely to increase as subjects studied broaden yet many libraries do not openly advertise interloan services to students because they have not the staff time to deal with the increased work that would result. The increased use of ILL could have more far reaching effects. However the speed and success of NLL will lead to a reconsideration of which periodicals a college library should buy and which bind. Many back numbers are too little used to earn shelf space, but changes from examination to assignment based work has resulted in a fourfold increase in the use of periodicals at one college.

29. Recommendations for further research

To investigate the efficiency of a college library it is necessary to have a fairly detailed picture of the service which is offered and of the use being made of it. This means that a wide variety of statistics concerning library services and the use made of them must be kept over as long a period as possible. At the moment analysis is only possible in the few instances where this information is available already.

It is also necessary, ultimately, to try to measure how far the use which has been made of the library has actually benefited the reader. This is a very subjective matter, involving an analysis of the readers' needs as well as his wants, and we can only await developments in this area. However, as the nature of college courses change and as the type of person entering and the types of material used also alter, it is a subject which will need more careful consideration. This type of information, both quantative and qualitative should be used as feedback information to help the librarian make decisions on selection and relegation, loan policies, bibliographic services and catalogue organisation. More intensive research is needed to give librarians a clearer picture of what is actually happening in their libraries. It is particularly necessary to investigate ways of assessing loan periods for particular groups of books and to find out how users categorise their different needs. Investigations are needed into matters of library policy and into reader education. An understanding of both of these will enable a better service to be given. We particularly need to know how the reader uses the library and for what purposes. Some investigation into the continuation of departmental collections, their usefulness and any inefficiency caused by these would also be beneficial. These can only be judged, in liaison with lecturing staff and in the light of their relevance to the expressed and unexpressed needs of the whole college community.

In planning programmes of future research into the effective use of library materials and services it is important to include in the questions asked these two caveats. Can the information, if I obtain it be used in any practical way to improve the service? What will I do if the results are contrary to my expectations?

Even before this perhaps, one should ask, is the data I need available over a long enough period of time? In other words it is important to realise that to investigate stock use, it may well be necessary to collect and store statistics for a period of several years prior to carrying out the research. If this has not been arranged well in advance much of the usefulness of the results may be lost because there is no way in which a short term ad hoc project can hope to create such data.

When systems have been set up as a result of research along these lines, it is then important to monitor them in operation so that divergencies from the expected probabilities can be acted upon before systems have become seriously inadequate or ineffective.

References

Buckland M.K. and Woodburn T.	Analytical Approach to duplication and availability at Lancaster university. Lancaster University 1968.
Buckland M.K. and Woodburn T.	Systems Analysis in a university library. Lancaster University 1970.
Peacock P.G.	The Short Loan Collection in a University Library. J. Librarianship Vol. 4 No. 2 April 1972.
Morse P.M.	Library Effectiveness: A Systems Approach. MIT 1968.
University of Warwick Library.	Report for the Session 1970/71
University of Bristol Library.	Annual report of the Librarian 1970/71
Nottingham University	Report 1970/71
Reading University.	Report of the curators of the library 1970/71
Tipper D.M.	The Reservation System: An Examination of its contribution to an Effective System in a College of Education Libary. Education Libraries Bulletin No. 44 Summer 1972. University of London Institute of Education.
Urquhart J.A. & Schofield J.L.	Measuring Readers Failure at the Shelf. Journal of Documentation Vol.27.No.4 Dec. 1971 ASLIB.
Urquhart J.A. & Schofield J.L.	Measuring Readers Failure at the Shelf in three University Libraries. Journal of Documentation, Vol.28. No.3. Sept. 1972.
Lomax D.	Focus on Student Teachers, Higher Education Review: 3.1. Autumn 1970.
Slater M.& Fisher, P.	Use made of technical libraries. ASLIB. Occasional Publications No. 2 ASLIB, 1969.

PART III A. APPROPRIATE LEVEL OF ANNUAL BOOKFUND FOR A COLLEGE OF EDUCATION LIBRARY; main elements required in a possible formula for calculating a college's requirements and its possible use for allocation of bookfunds.

1. Introduction

Although references to certain aspects of the provision of materials have been made in Part II, e.g. duplication, interloans, delays in book processing, the initial overall satisfactory provision of materials needs separate consideration. The discussions in the following pages are concerned with the fulfilment of the First Objective, i.e. the acquisition of appropriate and sufficient materials (see Part I, Sections 14 to 17).

This part of our report is concerned to discover what are the appropriate levels of bookfund required for the needs of colleges different in size and in the courses offered, and to show how colleges might claim bookfunds at these levels. It shows also how the basic information needed for claiming funds may be used for the allocation of them to various subject and special areas. Methods of selection and coverage of current and retrospective material are discussed later in our report. Our concept of the stock of a college of education library is of a collection of an adequate size and range to contain the best older and new material which has current value for the study of all courses in the college and for the personal development of the students. There can be no place in such libraries for highly specialised research materials which must be provided in a smaller number of university and large regional research libraries since they are beyond the means and space likely to be provided in college of education libraries. We consider the number of additions needed annually to maintain a stock of this sort, and briefly consider also the maintenance of such a stock by replacements or alternative purchases, and the implications of stocking non-book materials which show that a materials fund will be needed in the long term to replace the bookfund.

There are two distinct requirements for the satisfactory funding of libraries. The first is the pre-requisite of an adequate basic stock covering the needs of all courses including B.Ed. courses and interests within the college and is usually provided by a series of capital grants. We expect also that whenever a new course is agreed or a substantial new speciality begun, the librarian will obtain the necessary capital grant to build up basic stocks of books, periodicals and other materials in these subjects. Secondly, thereafter, adequate annual maintenance grants are needed to acquire from all that is currently available, new, still in print and secondhand, those materials required to support college objectives. Output of new materials is still growing rapidly and we recognise that colleges must be highly selective in their purchases.

2. Existing standards for providing annual bookgrants in relation to the needs of the colleges

At present there are two standards for financing college library bookfunds. The table below summarises the various ATCDE/LA standards and DES recommendations concerning bookgrants. The latter are updated each year. Both exclude audiovisual materials, stationery, equipment and books not based in the central collection, but include binding, periodicals and microform materials.

ATCDE/LA

Basic bookgrants

1967 standards, prices as at June 1966
£6 each for first 500 students
£15 each for first 50 academic staff
£3.12s. for each student above 500
£9. for each member of academic staff above 50
+ 10% to cover binding and replacements, e.g. for a college of 750 students and 75 staff, £5362. AV materials - no adequate basis of calculation exists, but cost of these is additional

B.Ed. bookgrants

Supplemented 1969

Annual maintenance grants

(to be added to basic grant)

For education	£200
For every other BEd. subject	£100

and in addition:

either

For every 4th year student up to 100	£6
For every 3rd year student up to 100	£4
For each 4th year student over 100	£3
For each 3rd year student over 100	£2

or (in cases where 3rd year students cannot be identified)

For each 4th year student up to 100	£10.
For each 4th year student over 100	£5

All figures refer to book prices as at June 1968, e.g. for a college of 1000 students with 10 B.Ed subjects and 75 3rd year, and 60 4th year B.Ed. students
Basic grant £6,600 (1966 prices)
B.Ed. capital grant £4,800 (1968 prices)
B.Ed. maintenance grant £1,860 (1968 prices)

DES

College Letter:	2/68	6/69	4/70	1/71	7/72
Students:					
1-500	£7.14s.	£8.16s.	£9.14s.	£11.25	£12.38
501-1000	£4.16s.	£5.10s.	£6.	£6.96	£7.66
Over 1000	£3.10s.	£4.	£4.8s.	£5.10	£5.61

Books going to departments are excluded, as is the cost of AV materials.

College Letter:	6/69	4/70	1/71	7/72
For each student in 4th year of a course leading to B.Ed. or other first degree	£15	£16	£18.56	£20.42

This sum is substituted, not added to the basic grants (as above) for this group of students

In Table 8 may be seen the sums obtainable by our 8 cooperating colleges in 1971/2 by these two alternative formulae. It will be noticed that the original ATCDE/LA formula has only one reducing step at 500 students, but the DES formula has two. Probably if more colleges of over 1000 students had existed in 1967 a further step would have been introduced. A difficulty arises over B.Ed. grants because in some B.Ed. courses students are not doing entirely separate work until the fourth year, in others they become separate and require different and more advanced materials to support their courses in earlier years. The ATCDE/LA formula, unlike the DES, does provide for additions to be made to cover both these sets of circumstances, in the third and fourth years when the need is greatest, and allows for a more generous fourth year allowance where librarians cannot distinguish third year B.Ed. students. In fact they are likely to require additional and more advanced materials.

These formulae have long been felt to be a very crude measure of a college's requirements. The DES formula only recognises student numbers **explicitly** and confines B.Ed. grants to students in the fourth year. The ATCDE/LA formula besides student numbers considers, in some measure, the teaching needs of staff, and in its B.Ed. provision, the spread of B.Ed. subjects, with a special recognition of the importance of education. It also allows an addition of 10% to the basic grant to cover costs of binding and replacements. Our investigation of college needs shows there are other very important variables, for example, the number, spread and variety of courses which may include many or few options and alternative courses; the distribution of students in large or small groups which are doing the same work at the same time; the high average unit cost of certain subjects compared to others, "bookishness" *; the effect of geographical isolation which requires much great self-sufficiency in a library; the number of age ranges for which students are being trained, e.g. nursery, infant, junior, middle, secondary; the effect of undertaking post graduate professional training, in-service courses, special courses of various kinds, e.g. teaching of the severely sub-normal, or mentally handicapped. Both formulae include a tapering off in amounts granted to larger colleges, in a series of steps, the ATCDE/LA having one step at 500, the DES two at 500 and 1000 students. These formulae were both produced at a time when the average size of colleges was much lower than it is now, and when colleges of 1000 or more students were very uncommon. Now that there are many with over 1000 students, this tapering off , in our view, is too drastic. It amounts, for instance, to 27%-31% under both formulae in the case of a college of 1500 students. We question, therefore, whether the economies, which were thought to result from size amount to such large proportions in the largest colleges. The nature and effect of these variables is considered in detail later, together with the means of measuring them.

There is some evidence to show that when one compares bookfunds of colleges of education with those in other academic libraries, especially universities, the colleges are shown to be worse off, after due allowance has been made for the fact that broadly speaking colleges do not aim to collect research material except in the field of education Roberts in the article listed at the end of our report expresses concern at the low level of college bookgrants even though in the last few years the general standard has been raised. Cadney in the chapter of finance and bookstock in the Library Association book College of Education Libraries quotes a survey in the Birmingham A.T.O. in which the ATCDE/LA formula is acceptable only as a minimum level of provision. He notes the need for better provision for B.Ed. courses irrespective of student numbers, comments on the variation of costs in different subject departments, and shows that some subject studies are more book based than others.

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* i.e. the greater dependence of certain subjects on printed materials as the means of study.

A recent survey of the college libraries in a Midland Area Training Organisation notes very serious deficiencies in bookfunds. It emphasizes the need to keep up with increases in book prices, the effect of the 'knowledge explosion' which is increasing the total pool of materials available, and the change to a situation where students and pupils have to find out much more for themselves, which greatly increases the demands upon, as well as the range of resources required. Teams from universities, sometimes including librarians have made inspections of college resources for the purpose of approving B.Ed. syllabuses. These have frequently shown up deficiencies in the depth and range of resources available.

A survey of colleges in a Northern ATO in 1969 also revealed considerable dissatisfaction with the stocks available in college libraries, especially among third and fourth year students. For example, in one large city college, 128 out of 169 students expressed some dissatisfaction with stocks. The National Union of Students has frequently commented on the disparity in resources provided for colleges and polytechnics as compared to universities. Librarians have, however, been inhibited from expressing dissatisfaction with book funds as they are, because of the serious shortage of staff which makes it difficult for them to acquire or process more books than they do now. Many also have till recently been spending large capital grants.

3. Methods of examining the problem

It has been suggested to us that one way of determining the appropriate bookfund for a college library would be to say that it must not fall below a certain minimum percentage of college expenditure. The Parry Report, in paragraph 621 supports the view that the annual cost of library provision in a university of medium size should not fall below 6% of the budget when the standards are applied which it would like to see. Of this amount, half or 3% would represent the expenditure on books, journals, binding and sundries. The average expenditure at the time of the report was 3.8% of the total budget for staffing and bookfund combined. We have looked at the expenditure made by colleges in their bookfunds as a proportion of tuition costs in the years 1968/9, 1969/70 and 1970/71. It has seemed best to use as a basis the tuition costs included in the cost tables distributed annually to all colleges of education and LEA's by Teachers' Branch of DES since they are common to all colleges whatever their circumstances, and to exclude catering, residence and lodging costs, also capital or special expenditure and debt charges which vary greatly between different colleges. Since 1968/9 the cost of administration and administrative staff has been included in tuition costs and we therefore have since then a reasonably constant basis for working out the percentage represented by the bookfund. If one looks only at general colleges, the following picture emerges, when voluntary and maintained college figures obtained from the DES annual cost per student table are analysed.

Year	Range of average cost per student for library books	Total tuition costs £	Total cost of library books (recurrent grants) £	% library books of total tuition costs
1968/9	£7.80 to £10.20	37,183,194	760,380	2.04
1969/70	£8.20 to £9.90	42,041,836	851,262	2.02
1970/71	£9.10 to £10.80	46,581,069	955,431	2.05

These figures are derived from the tables provided by the DES for general colleges voluntary or maintained, inside and outside the ILEA area, and the LEA day colleges. The figures on library expenditure reflect in part the application of the DES grant formulae, but many colleges at this time did not spend as much as this. There is a wide variation in average tuition costs between colleges of the same size, and there seems to be no regular overall economy resulting from larger colleges compared with smaller. Because of the wide variation in average tuition costs, and because a formula based on a percentage of tuition costs cannot take account of the important variables already mentioned, we do not consider this could be a successful or just way of determining bookgrants for individual colleges, even if we were able to decide what the appropriate overall level and thus the percentage of tuition costs should be.

It would be very difficult to measure the success of the application of the DES formula by examining the satisfaction of teachers and students in every subject with the library stock. Readers cannot specify in detail what they would like if they have not seen it. We have already mentioned earlier some deficiencies reported and there was some evidence from our failure surveys and from our applications for interloan material that the present bookfund at College A did not meet all requirements. Many departmental book selectors found themselves severely restricted in what they could buy, though some had to be urged forward to spend adequately because they were not concerned about deficiencies. Our investigations into book selection methods show there is usually uneven coverage of new material and while some departments would like to spend much more, others need a great deal of help to examine new and old material and select what is needed to fill gaps in the stock. Many lecturers come from schools where library provision is often very seriously inadequate, and they are not used to the level of provision needed in an institution which offers courses at degree level. They are not all able to survey the whole of the resources available and then make wise choices.

Neither of the present formulae rests on any firm basis which can easily be defended by those stating a claim within the resources available for teacher training. We therefore decided that as well as some comment on book selection methods (reported elsewhere), a direct investigation was needed into what a college should acquire from a whole year's output of new material. In this way we would find what were the chief factors operating at the time that judgments were made on what material to acquire, and what was the scale of cost for at least the central core of a year's purchases, namely the material reported in an annual volume of the British National Bibliography. Those empowered to make the choice would also be faced with the full range of items from which to choose.

Methods for investigating this problem and a possible way of producing a formula were suggested by the now classical work of Clapp and Jordan in 1965 on "Quantitative criteria for adequacy of academic library

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collections" which though concerned with the optimum size of university library collections did make a new approach to the basis for calculation. This was followed up by many other writers in College and Research Libraries (see chief references listed at the end of this report). In March 1970 a very interesting document appeared A model budget analysis system for libraries in which two universities and four colleges in Washington State, U.S.A. have together produced a formula based on units of library resources (i.e. 1 volume or 1 reel of microfilm) first for minimum quantitative adequacy of holdings, then for the minimum number of acquisitions per year, then for the expected withdrawals. The main factors in calculating the number of units of library resources required are the number of full time equivalent students and staff with additional units per Master's field where no Doctorate is offered, per Master's field where a Doctorate is offered and per Doctoral field, i.e. a combination of student numbers and subject areas covered at different levels. The minimum number of acquisitions per year is established at 5% of the units held at the beginning of the year and the number of withdrawals is to be based on the number experienced in the most recent actual year up to a maximum of 3%. Massmann and Patterson in 1970 produced a more objective formula for a budget for current acquisitions, based on an examination of the cost for one year in the most common fields of undergraduate study of items thought worthy of review in 71 professional journals - a method somewhat similar to ours. Much of the work in U.S.A. was concerned with the minimum size of the collection needed and with problems of correct book selection, and allocation of funds to departments. We consider book selection later in our report, and have for the moment accepted the ATCDE/LA view of the minimum size of library collections of books and periodicals. Most colleges have now passed well beyond the minimum size. This enables us to concentrate therefore on an investigation of what a college needs in a year, and what weighting should be assigned to the various factors involved.

Our aim is, if possible, to produce a points formula for annual book budgets in which the value of a point can be established from an examination and costing of what a library should have to support its work from an actual year's production of new literature with proportions added for retrospective, non-British and other requirements. We have noticed that year by year (in the figures published by the Bookseller) there is certainly no diminution in the number of new items and reprints published in the fields of interest to college libraries. It seems safe to assume that there will be at least as much new material from which to select in the foreseeable future as there is now.

In every financial year through its processes of selection a college buys books in the following categories.

1. Items published in the current calendar year. These may be divided into British items appearing in the British National Bibliography, items from abroad (American being probably the largest group), or British items of a non-commercial nature which appear in that year.

2. Items published in the previous calendar year, sub-divided as above. Those responsible for selection often wait for reviews or other opinions or to see the books, so that selection of items is delayed for some time after publication.

3. Items published earlier than 1st January of the previous year.

4. Investigation at College A: current BNB material

In an attempt to quantify what a college should buy in a year if no absolute financial limitations existed, by a reasoned and well moderated choice, CELRP conducted a survey at College A through interviews moderated by library staff with the 25 or so members of the academic staff, who in consultation with their colleagues and the library staff, are responsible for book selection. Detailed consideration was given to the whole output recorded in the latest available *BNB* Annual Volume, i.e. that for 1969. This seemed to us the tool which included the largest fraction of what the college would like to buy, and which was arranged in classified subject order, thus enabling selectors easily to confine their attentions to those sections likely to be of interest. Time would not permit examination by every selector either of more than 1 volume of *BNB* or the whole of the *Cumulative Book Index* Annual volumes, which are arranged in alphabetical order. The *BNB* index was carefully combed to provide lists of likely subject numbers for each department in the light of profiles built up from their syllabuses and information obtained by CELRP by means of a questionnaire. Steps were taken as far as possible in the recording of the books selected at these interviews to eliminate overlapping, e.g. by English and Drama Departments. Certain areas, e.g. bibliographies, reference materials, children's books, background reading, local studies were chosen chiefly by library staff (which is their normal practice), but help was sought where needed from interested colleagues, e.g. in books concerned with the teaching of reading and numeracy. Many of the books the college had actually bought and used. Others were not previously known to selectors but they were able to consult colleagues and we are satisfied that reasonably sound choices were made, though some colleagues found it difficult to separate B.Ed. needs from Certificate needs, and some would have preferred more time to consult other opinion before making a decision.

The Librarian already had a practice of asking library agents in all departments to check annual volumes of *BNB* in their subject areas to avoid vital books being missed, though only a few departments actually do this. An exercise had been carried out with *BNB* annual volume 1968 to defend the college library's estimate for book requirements, in which several departments had listed the cost of new materials required to support their work. This method of approach was therefore not unfamiliar to some of those who took part.

From these interviews totals of the number of titles selected, the amount of duplication needed, and the cost of each section of book selection were recorded. Unit costs for different departments were also arrived at for material listed in *BNB*. Discount was ignored as many colleges have no library licence or receive no discount, except that given for single copies of text books by educational publishers to all colleges. The selectors were asked to record their recommendations under the following headings.

Certificate Courses - main subject and subsidiary subjects
B.Ed Courses
Staff teaching needs
Special courses
Curriculum needs
Borderline items
Items desirable in other neighbouring libraries (usually
very specialised or expensive items).

New editions were normally regarded as desirable to replace old ones, although it was not accepted as realistic to purchase expensive reference tools such as *Who's Who* every year. Hardbacks were usually preferred to paperbacks because of their longer expected life of service.

The results of this survey which took place during Spring and Summer terms 1971 are set out in Table 1 on the following page.

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TABLE 1. COSTS AND PROPORTIONS OF ITEMS APPEARING IN BNB ANNUAL VOLUME FOR 1969 FOR THE VARIOUS BOOK NEEDS OF COLLEGE A

Department	Main Certificate Course £	Av.Cost Per Title £	Subsid. Certificate Course £	Av.Cost Per Title £	B.Ed. Course £	Av. Cost Per Title £
American Studies	242.77	2.27			129.85	2.42
Art & Design	196.92	2.24			400.44	3.45
Drama	162.80	1.53			7.35	7.35
European Studies	56.73	1.36			45.50	2.16
English	366.77	1.45	3.55	1.18	175.94	1.83
Geography	99.83	2.32			211.40	2.18
History	158.40	2.43	0.75	0.75	116.72	1.93
Mathematics	154.85	1.81			192.41	3.40
Modern Studies			127.39	1.51		
Music	36.55	1.58	19.95	3.32	52.40	2.62
Physical Education	224.60	1.49			106.67	1.46
Religious Studies	361.82	1.20	7.32	0.43	145.44	1.80
Science	237.09	1.69	4.35	0.48	230.42	2.67
Sociology	266.30	2.07			154.72	2.72
TOTAL - all subjects	2565.43		163.31		1969.26 53.50 2022.76	
% of above total	53.99		3.44		42.57	
% of overall total	31.85		2.02		25.11	
Curriculum	£	£			£	£
Education	928.27	1.50			292.23	2.17
Children's books and textbooks						
General background and local studies						
Reference and bibliography						
Compensatory Education						
TOTAL	5244.75		163.31		2314.99	
% of total	65.14		2.02		28.75	

+ N.B. Curriculum needs are added to Education for the purposes of the final formula.

SELECTED BY DEPARTMENTAL BOOK SELECTORS AND RESEARCH STAFF, AS ESSENTIAL

+ Curriculum Course £	Av.Cost per Title £	Teaching Needs of Staff* £	Av.Cost Per Title £	Overall Av.Cost Per Title £	TOTAL COST £	%	Cost of Single Copies £	Cost of Duplication £
				2.31	372.62	4.62	357.17	15.45
12.74	1.03			2.85	610.10	7.57	601.47	8.63
0.50	0.50			1.60	170.65	2.11	113.60	57.05
0.22	0.22			1.61	102.45	1.27	101.58	.87
58.52	1.17			1.52	604.78	7.51	541.81	62.97
16.95	o.81			2.88	328.18	4.07	320.93	7.25
25.40	1.15	21.05	3.01	2.08	322.32	4.00	320.36	1.96
149.37	0.77			1.94	496.63	6.16	354.29	142.34
				1.51.	127.39	1.58	116.77	10.62
11.07	1.84			2.18	119.97	1.49	119.97	
3.43	0.85			1.46	334.70	4.15	276.90	57.80
31.09	0.63.	21.40	2.67	1.28	567.07	7.04	507.49	59.58
14.37	0.76	11.05	1.30	1.80	497.28	6.17	418.53	78.75
4.27	0.71			2.22	425.29	5.28	353.24	72.05
		53.50			4751.50	59.00	4504.11	575.31
						100.00		
						59.00		
				£	£ 327.93	4.07	£	£
				1.67	1220.50	15.15	874.58	345.92
				0.58	677.42	8.41	591.85	85.57
				1.89	213.22	2.64	192.85	20.37
				2.22	795.49	9.88	791.09	4.40
				1.47	64.92	.80	60.50	4.42
		53.50		1.65	8050.98	100	7014.98	1036.00
					100		87.20	12.80

*N.B. Teaching needs of staff are included in B.Ed. requirements.

The figures given in this table show the differing demands of subject departments in respect of one year's output of new literature and reprints (excluding periodicals) appearing in BNB 1969. The average cost per title is derived from a division of the total cost of all titles bought by the number of titles. These costs have been checked with figures which became available at the end of the financial year 1971/2 (see Appendix III A) of this report. The figures of costs include amounts required for duplication, and this appears separately in the columns on the right amounting to almost 13% of the total. The table also shows the relative demands of Certificate and B.Ed. courses. During the interviews items were put in the B.Ed. column only if they were over and above Certificate requirements - a few departments found it hard to distinguish and in these cases we followed the norm established by the majority. Only a small extra requirement was needed for subsidiary subjects because usually the same books serve both certificate and subsidiary needs. One subject, Modern Studies, only offered courses at subsidiary level.

The percentages of the requirements of different areas accord fairly closely with the percentages actually used according to College A's book fund allocation in 1970/71, as agreed by the Educational Resources Committee of the College, though of course the latter include all purchases not merely current BNB items.

It must be remembered that most annuals have been regarded as chargeable to the periodical fund, which is dealt with later.

The amounts assigned to curriculum studies by subject departments are to meet the needs of professional education and it seems best to consider these alongside the demands from the education department, since colleges must organise these courses in association with education courses, whoever is responsible for the lectures. The average cost of such items (at 1969 prices) is much lower than that for other requirements.

The average costs per title are significant and help us to distinguish those departments and areas of spending which incur above average unit costs, though some departments buy much foreign material and are not fully represented here. This question is considered more fully later in relation to items purchased in 1971/2.

It proved difficult for the selectors to extract from their requirements those books required to cover their own teaching needs though this type of requirement does exist. In our future thinking we have therefore for convenience treated the cost of these as part of the B.Ed. requirements. In a college where no B.Ed. work takes place they would be included in Certificate provision.

It is not appropriate to divide into any further sub-divisions certain areas of expense, viz. children's books and text books (which at College A have to cover the whole range from infant to A level), general background and local studies, reference and bibliography, and compensatory education (at the time of the survey the only special course at the college). These therefore appear at the end of Table 1.

The relative demands on the bookfund for Certificate, B.Ed. and curriculum courses are worked out before this last group of demands is added to the totals. This helps us to quantify the relative demands of all the main factors in the situation. At College A, of the total demand, ignoring elements such as periodicals and binding which we deal with later,

%

32 is to meet Main Certificate courses in 13 departments.

25 " " " B.Ed. courses in 13 departments (includes staff teaching needs 1.39%)

19 " " " Education courses (main and B.Ed.) and Curriculum courses

8 " " " School Services books.

13 " " " General Background books and Reference and Bibliography needs.

1 " " " Compensatory Education courses.

2 " " " Subsidiary courses.

100% Total

The following departments incurred unit costs well above the average:-

Average unit costs £1.65 (1969 prices).

	£		£
American Studies	2.31	Music	2.18
Art & Design	2.85	Science	1.80
Geography	2.88	Sociology	2.22
History	2.08	Reference & Bibliography	2.22
Maths	1.94		

In our investigation we noted some examples of borderline items and items which we would like our students to have access to in other libraries. The following are some examples of books which are too borderline or too expensive for the college to consider in relation to other demands made upon the funds.

Dictionary of International Biography 5th. Ed. 1968/9 (purchased every 3/5 years). £8.00

G.B. Parliament. H. of C. Select Committee on the Education of the Lower orders. First to fifth reports from the select committee. £14.20

G.B. Parliament. H. of C. Select Committee on the state of children employed in the Manufactories of the United Kingdom. Report on the Minutes of evidence on the state of children employed 1968. I.U.P. £14.00

Mill John Stuart — Essays on ethics, religion and society 1969 — £8.00

Wade A — A bibliography of the writings of W.B. Yeats. 3rd. Ed. — £3.15.

The value of the information summarised in Table 1 is that it throws light on the relative importance of B.Ed. studies, Certificate studies, Education, curriculum and professional courses, and the other main types of provision needed, as well as on the total cost and the relative costs per unit of different subjects, and on the amount of duplication proposed for the books covered.

5. Confirmation elsewhere of College A's findings

From this part of the investigation therefore we arrived at what we believe to be a soundly based concept of the cost of one part of a college's annual requirements so far as they appear in BNB though of course the actual purchase of this whole output would be spread out over the current financial year, the following financial year and a very small fraction in the following years. It has not been possible within the time and finances of CELRP to repeat such a time consuming and elaborate survey in other colleges. We did ask all our cooperating colleges if they could carry out a similar survey with BNB 1969 in separate subject areas, but only a few were able to do this. At College D library staff and book selectors investigated mathematics and history. Of course , colleges' individual approaches to subject coverage and size of departments are likely to be different, though if a good range of subjects could be covered there would be a better basis for comparison. The results when compared with College A were as follows (including curriculum materials).

	College A	College D	% difference D compared to A
History total purchases	£322.32	£470.29	+46%
Mathematics total purchases	496.63	374.64	-24.6%
	818.95	844.93	+ 3%

In 2 other colleges single subject areas were examined. The departments which volunteered to do this were very enthusiastic bibliographers and the restraints were not as great as operated overall in College A. The result was that in one college the overall expenditure suggested was 38.8% greater than in College A in the field of religious studies and most of this was in relation to B.Ed. needs. In another college where biology needs were examined, the situation was not really parallel to that in College A because biology was the only science taken to B.Ed. level and had to make wider provision. Here the amounts suggested were four times as great as at College A. We believe that if full examinations could be made over all subject areas this would show that our total figures are certainly not an overestimate.

We believe that courses are broadly similar in all colleges, since examination requirements are of a similar standard, and that if one looks at the combined expenditure needed for all departments, this scale of expenditure would be required in all, allowance being made, of course, for the variable factors which affect the local situation. Though some subjects might require less than in College A, this would be balanced by others which would require more.

6. Proportion of total expenditure represented by current BNB publications

Current BNB publications are only one part of what a college library buys each year. To ascertain the balance of these other needs compared to current BNB needs the orders actually made by College A in 1969 were examined so as to arrive at the proportions which in a well established library were allocated in practice by the book selectors to the chief categories involved. A full description of the method used and results obtained is given in Appendix III A.1.

If we ignore certain new departments which had not reached a position of stability in their requirements, which were not frequently found in other colleges and which required large numbers of foreign publications we find that the following percentages result:

Category A (Current year BNB items)	39%
Category B (Current year foreign and non BNB)	7%
Category C1, C2, C3, (retrospective items)	54%

These proportions were checked at a **number** of our cooperating colleges (see details in Appendix III A.1)and if averages are worked out for the two years at College A, and Colleges B, C, D, E and F the proportions are A 41%, B 4%, C 55%. Since the variations from this are not very great in any of these colleges we have used these proportions in the calculations which follow. They seem to apply reasonably well to the present situation in well established colleges, and there seems little likelihood that the retrospective elements will diminish in size because selection is, wisely, often made late for British items and also changes of staff and courses mean that new options and new literature requirements appear every year especially as B.Ed. courses develop. Furthermore, the selection of non-BNB items is always longer delayed and many subjects require foreign material e.g. American books on education, psychology or English literature.

7. Proportions of expenditure on current year's production of new items in that year and in later years.

It is now necessary to establish what proportion of all the BNB publications for a year were bought in that year, what proportion in the year following, and what proportion later still. In this way we can correctly spread the total cost for the 1969 BNB publications wanted by the college and thus add a value in terms of 1969 costs to the whole of a year's desirable purchases. We assume that the proportions would remain the same in the desirable situation as in the actual situation. Because the financial year falls 3 months behind the calendar year in the maintained colleges there will be some books ordered in, for example, the year 1969/70 which are 1970 publications. Our investigations show these are relatively few in number because most of the money for books is, in fact, spent by December 31st each year, and in any case selection is usually made some time after publication. Moreover, these small numbers of items are balanced by a similar number the year before and the year after. In our proportions, therefore, we have considered them as belonging to the calendar year in question.

Our detailed investigations at College A and in other colleges are reported in Appendix III A. 2 . Our conclusion is that the most reliable proportions to follow are the 1970/71 figures for College A which represent the analysis of the largest total expenditure in a well established

TABLE 2 PATTERN OF EXPENDITURE IN COLLEGE A OVER 3 YEARS 1969-71

Category		% of Total	Cost	1969	1970	1971
Items in BNB	A. Current year	41	1969 prices £5,691[1]	▧	▥	▤
	C1. One year old	12.5	1968 prices £1562[2]	▨	▧	▥
	C2. Two years old	4.5	£490[3]	■	▨	▧
Non-BNB Items and BNB items older than 2 years	C3. retrospective (i.e. not current year)	38	1969 prices £5,073			
Non-BNB items	B. current	4	£534			
TOTAL		100	£13,350			

1. i.e. $\frac{41}{58} \times$ £8050.98
2. i.e. $\frac{12.5}{58} \times$ £8050.98 - 10%
3. i.e. $\frac{4.5}{58} \times$ £8050.98 - 22% at 1967 prices

■ = BNB items of 1967

▨ = BNB items of 1968

▧ = BNB items of 1969

▥ = BNB items of 1970

▤ = BNB items of 1971

college which already has a large bookstock. There is support for these levels from the figures from other colleges, and substantial agreement on 41% of the expenditure, i.e. the proportion represented by current BNB items.

The proportions we use therefore are:-

Category	Years	% of Total
C2	1968 BNB items	4.5
C1	1969 BNB items	12.5
A + B + C3	1970 BNB and all other items	83.0

It will be seen that we have subdivided non-current items into three separate categories, C1 being BNB items, 1 year old at the time of purchase, C2 BNB items 2 years old, and C3 non-BNB items and the very small number of BNB items older than 2 years.

When this information is combined with that in Table 1 and the overall figure of cost £8050.98 for BNB items for all requirements at College A is used to arrive at the costs based on the percentages in the table, we can produce the diagram opposite (Table 2) to show the pattern of expenditure over 3 years, giving percentage proportions and amounts of money required at 1969 prices. We know that the total cost of A+C1+C2, i.e. £8050.98 gives us the value of 58% of the total. Table 2 shows how the values for each part are arrived at on a percentage basis.

It will be possible to update the prices to 1971/72 figures or those of any other year by a comparison of the costs per item from the Library Association Record's annual survey and other sources as they become available.

The unit cost of 1968 items bought in 1969, and 1967 items bought in 1969 is probably less than the unit cost for 1969 items bought in 1969. We have, therefore, deducted 10% for 1968 items and 22% for 1967 items from the cost of such items in arriving at the figures of cost given in Table 2.

8. Total book requirements at College A 1969/70

We have now arrived at an estimate of the total sum which College A's Library would like to have spent on books in 1969/70, (£13,350) assuming that the proportions of its spending in the main categories A, B, and C1, 2 and 3 can be based on the known costs of A, C1 and C2 (58% of the total). It is reasonable to assume that proportional costs in the actual situation can be extended to the desirable situation.

9. Unit Costs

The overall unit cost obtained from College A's 'ideal' book selection exercise based on BNB 1969 was £1.67. This can be compared with actual overall unit costs produced by each of the 8 colleges which kept records of all items purchased in 1971/2.

College				
	A	£1.75	E	£1.65
	B	£1.96	F	£2.06
	C	£1.64	G	£1.88
	D	£1.52	H	£2.30

With the reduced bookfunds which colleges now have, their purchases in 1971/2 of BNB and non-BNB items fell within the band of unit costs of £1.52 to £2.30. We expect that if they were able to purchase more of the items they want, and did not have to rule out so many expensive items, the

TABLE 3. Proportions of bookfund spent by the eight colleges on periodicals and binding, and expenditure on A.V. materials. Total bookfunds exclude non-recurring grants and any discount received.

	1969/70+					1970/71								1971/72							
	Total book-fund	£ Per-iod-icals	%	£ Bind-ing	%	Total book-fund	£ Per-iod-cals	%	£ Bind-ing	%	£ AV	Total book fund inc.AV	%	£ Total book fund	£ Per-iod-icals	%	£ Bind-ing	%	£ AV	Total book fund inc.AV	%
A	12499	1250	10	655	5.2	12500	1500	12	12[illegible]7	10.5	750	13250	5.7	14046	1725	12.3	699	5	1000	15046	6.6
B*	10083	968	9.6	(38)	0.4	13745	1144	8.3	(747)	0.05				10200	1450	14.2					
C	9585	1060	11	384	4	9785	1214	12.4	413	4.22	422	10207	4.2	11330	1290	11.4	337	3	200	11530	1.7
D*	5580	845	15	(1320)	23.7	6950	1060	15.2	(1290)	18.6				9700	1060+	11.9	(1300)	13.4			
E	7350	750	10.2	300	4.1	8740	940	10.8	300	3.4	691	9431	8.1	11027	1260	11.4	250**	2.3	1000	12027	8.3
F	6635	613	9.2	100	1.5	8548	748	8.8	100	0.6	1015	9563	10.6	8675	835	9.6	100	1.2	1059	9734	10.9
G*	6500	300	4.6	(350)	5.4	7240	300	4.1	(350)	4.9	300	7540	4	7500	350	4.7	(350)	4.7	300	7800	3.8
H	4832	220	4.5			6346	295	4.6	250	3.9											
Total of A.C.E.F														45078							
T	63064	5106	8.1	1439	2.3	73844	7201	9.8	2270	3.1	-	-	-	72478	7970	11.0	1368	3	3559	56137	6.3

+ Estimates

* These college libraries are relatively new and their binding figures given in brackets are excluded from the final total because they have not reached a stable position.

** Some books now bought in pre-bound form.

unit costs would move nearer to the unit cost for the period shown in the LAR for BNB items for the period ending June 30, 1972, namely £3.27½. The above college unit costs for 1971/2 cover all purchases, not merely items in BNB. It is evident that items colleges actually purchase are well below the cost per unit of all items appearing in BNB.

In our research in relation to items appearing in BNB we have used the 1969 desirable figure in College A, but have updated it to 1971/2 prices by the addition of 27%, thus making the unit cost £2.12. It seems reasonable to use a unit cost of this order because it seems more nearly to reflect the cost of British materials which colleges would be likely to buy if they had better bookfunds. As expected, it still falls short of the average unit cost (£3.27½) of all items in BNB 1971/2.

Because in our assessment expenditure on items not in BNB has been calculated as a proportion in relation to BNB items, updating the cost by a percentage from 1969 to 1971/2 will cover the increase in cost of these items also. It could be argued that the overall increase ought to be somewhat larger still since there is some evidence that American books have increased in price on the British market even more than British books, and also secondhand prices are moving up very rapidly. It would be wise to monitor unit costs over a longer period if our recommendations are carried out.

10. Replacements

In our calculations replacements have not been separated from expenditure on new materials. Few college libraries have reached the point of excellence in their stocks where large numbers of discards are made each year, or sections systematically weeded out and replacements sought. The bulk of the books in college libraries have been bought in the last 8 to 10 years, and in the main are not yet obsolete. At some point in the future it may be wise to separate a proportion of total grants required for the purpose of replacements of items which are obsolete, worn out or missing. Replacement need not necessarily mean buying the same titles again, but may often best be made by the purchase of better alternative titles. In the funds for school services books we have allowed for the fact that their life is likely to be much shorter, e.g. of the order of 5 or 6 years. Thus one fifth or one sixth of the stock needs replacement every year in an established library. Our calculations therefore include an element to cover necessary replacements, which cannot easily at present be separated.

11. Binding requirements

Further additions to the bookfund so far discussed must be made to cover binding and conservation of stock e.g. reinforcement of paperbacks and protection of pamphlets. Surveys of the practice in the eight libraries involved, show that there is considerable variation - librarians, of course, being constrained by financial limitations as to what they would like to do.

Table 5 shows the proportions of their bookfund (excluding cost of audiovisual materials), spent by the eight colleges on binding and periodicals for the last 3 years, which is as far as figures are available. Figures before this are of less value because of the incidence of non-recurring grants to build up library stocks. The expenditure in audiovisual materials in some of the colleges only is also listed.

Perhaps the practice of well established libraries which have had considerable use of their stocks over the last ten years best shows the trend of percentage expenditure in this area. As more and more paperbacks needing reinforcement have to be purchased, as more periodicals are acquired which require expensive binding, and more stock reaches the point where decisions on discarding or binding must be made, we expect the proportionate cost of binding to increase to the level shown by the largest college, College A, whose average percentage expenditure over the last three years was 6.6%. The main types of material bound are periodicals (bound partly to discourage theft of individual parts which are irreplaceable), paperbacks, pamphlets and valuable older or out of print material. Some libraries use some of their bookfund to pay extra for pre-bound or reinforced versions of books, especially children's books which receive hard wear. Many standard hardbacks are probably replaced rather than rebound. We assume that the amount spent on binding will rise in proportion to total expenditure for the reasons given earlier. We believe that a reasonable proportion of the total bookfund to spend on all forms of conservation, repair and binding would be 6% The figures in Table 3 for binding show an upward trend, and probably do not cover in every library the full extent of expenditure as we have defined it. The ATCDE/LA standards (1967) allow 10% for binding and replacements.

12. Periodical requirements

Periodicals also are, in most libraries, separately provided for in the bookfund and form an element of growing importance in the stock especially as more advanced courses are undertaken and greater emphasis is placed on individual study. It is not easy, however, to secure maximum use of such a collection by staff and students, or to choose from a rapidly growing overall total of possible titles those which are best for the college's purpose. In the eight libraries, the average total number of titles taken in 1970/71 was 300, and the average expenditure has risen from 8.1% in 1969/70 to 9.8% in 1970/71 and, for some of them to 11% in 1971/72. The increases in cost of the sort of periodicals which colleges need to take, the ever growing proliferation of titles, especially in education, which contain the most up to date general and research information and the increase in the range of bibliographical indexes, all point to a continuation of the trend upwards in proportionate spending. We know that colleges are inhibited from spending as much as they would like on books. This is also true of periodicals and, from discussion with colleagues, we assume that the amount of inhibition is at least the same. We therefore believe that 12% would be a fair percentage to allow in our formula.

13. Audiovisual materials

Not all the colleges provide separately for the purchase of audiovisual items, but where the library has responsibility this can amount to a further substantial sum, to be taken account of in working out annual estimates, and for which provision must be possible in any viable library grant formula. The amounts spent, according to the record for the last available financial year, by the five colleges seriously involved in such expenditure represents a further addition of from 1.7% to 10.9% to the bookfund. We expect that in the coming years this element will increase in importance as this function becomes more centralised within the sphere of the library's responsibilities and as departments spend less. We do not expect that this will have the effect of reducing the need for expenditure on books and periodicals. In multi-media kits, books often remain the main element, e.g. language multi-media kits of Nuffield Humanities Project materials. Certainly a materials fund, rather than a bookfund, will be required in the future, so that well informed policy decisions can be made in relative spending on the different media. For the moment, however, this area of spending must be left to the librarian's estimate since some colleges will be committed to a full unified resource centre service while others will have varying degrees of responsibility. Thus we have made provision in Tables 6 and 7 for claims to be made under this heading.

14. Interloan requirements

The extension of college work caused by the B.Ed. degree, the establishment of many advanced and specialised courses and the increasing amount of research being carried out in colleges results in evergrowing demands for interloan services and the purchase of copies of items from other libraries. We regard this as an important charge to be met from the bookfund which is likely to grow as such services as the National Lending Library, already very speedy for social sciences and scientific literature, improve. Comparative investigation is required into the cost, staff time, length of delay to readers and the likelihood of further demands by other readers, in obtaining items by purchase or through ILL. In many college situations speed is of the essence, but it is common to find very large increases in the amount of interloan business, for example, at College A it was five times as much in 1970/71 as in 1968/9. (See Part II, Section 25)

Thus, in the tables that follow the librarian is allowed to make his own estimate of such costs. If we are right in aiming at a current stock which is intensively used by the college community, the corollary must be faced that some money must be spent on borrowing the less frequently needed materials when they are required and, accordingly, included in annual budgets.

15. Total library grant for books, periodicals and binding

Thus for the year 1969 College A should have had the following total library grant to purchase the current and retrospective books and periodicals thought necessary for the work of the college. Additions have been made for conservation and binding, but factors J-N of the tables which follow are temporarily ignored.

	% of total	Cost in 1969 prices
Total book grant	82	£13,350
Periodicals	12	1,953
Binding and conservation	6	977
	100	£16,280

A comparison is made in Table 8, Section 21, which shows how this level of provision compares with that produced by the DES and ATCDE/LA formulae.

If we compare with our own investigation, the proportions allocated in College A to Certificate and B.Ed. resulting from the application of the DES formula for the annual maintenance grant as in the year 1969/70, namely 88% of total grant to all other areas, and 12% to B.Ed., we see that our investigation shows that B.Ed. courses require a much greater proportion of the expenditure in terms of BNB items, namely 25.8%. The ATCDE/LA formula applied in the same year would give a higher proportion than the DES formula as it rightly makes allowances for education and other subjects irrespective of student numbers, as well as a per capita allowance for students in the 3rd and 4th year - the percentage claimable for B.Ed. courses would be 21%. Of course, the amounts in these formulae depend on numbers in the last two years of a four year course (in the ATO concerned B.Ed. courses are separate for the last three years) and at College A these numbers have not yet built up to a stable figure. It seems likely that something like 25% of the whole third year group of B.Ed. and Certificate students will regularly go on to the fourth year, i.e. 100 students and something like 37% of the third year students will be taking B.Ed. in the third year (i.e. c.150 students).

Our calculations do not depend so much on student numbers and in later tables it will be seen that 25.8% of the total book expenditure is accounted for by B.Ed. requirements, a figure somewhat larger than the ATCDE/LA formula provides, when B.Ed. requirements in all subjects and education are added together. Neither of the two existing formulae make sufficient allowance for College A's B.Ed. needs.

16. Investigation of a bookgrant formula applicable to all colleges

For this research to have any future value we must attempt to produce from it the main elements in a formula which could be used by librarians in asking for grants each year, and which is reasonably able to take care of any changes in requirements as circumstances change in the future. An improved basis of calculation would aid the DES and local authority officers who, in the annual estimates, have to consider the relative importance of claims on expenditure from different interests within the college.

From our investigations into past and current book selection practice, from discussions with other college librarians, and from our knowledge of what should have been bought in a large college with a great variety and depth of courses, we believe that the following are the main categories of need to be met from the annual bookfund, once a college has acquired the basic bookstock needed for all its courses. (If an entirely new main subject or special course is offered, a capital grant should be obtained to provide for these basic needs).

A. Certificate courses (main and subsidiary level); student study and staff teaching needs.

B. B.Ed. courses; student study and staff teaching needs.

C. Education, Professional and Curriculum courses, including one year Postgraduate course.

D. General Background, Bibliography and Reference books

E. Subsidiary or second subjects not covered above including Inter-disciplinary courses not already covered.

F. Special courses.

G. School Services book materials (children's books, school text books).

H. Periodicals.

I. Binding and conservation of book materials.

M. Audiovisual materials; purchase and maintenance.

N. Cost of interloans needed, and reprographic copies.

We decided that the best way to give appropriate weighting to these chief factors, and the smaller factors within these large groups, was to use a points system, and we started with 1000 points as being a large enough number to allow the finest allocation likely to be necessary.

17. Sections A, B and C of the formula

In weighting the first three categories A, B and C individually, we had regard to the results of our BNB 1969 work expressed in Table 1, the profiles and full description of the work of departments at College A and the result of discussions with our cooperating colleges. The proportions suggested by Table 1 and the work in arriving at suitable figures for College A within the overall total sum were modified by experiment using the needs of the other seven colleges, so as to arrive at a formula which would work for all eight colleges. Within these three categories, there are further variables, such as the total number of subjects offered at Certificate, B.Ed. or other levels. We arrived at the definition of a subject for the purposes of our work after discussion with colleagues and following experience at College A (see the definitions in Appendix III A.3) We also wanted a measure of the spread of literature required by a subject both for study by students and the teaching requirements of lecturers which reflects the breadth and depth of its teaching commitments at all levels, the number of alternative courses lasting for a year, or successive parts of courses which make up a full alternative, and the number of special studies or pieces of individual work required (see definitions given later). These options were felt to make the most demands on the literature of the subject after the first year. We have tried to ignore the more insignificant factors, and concentrate on allocating points by means of the most significant.

There is also the very important factor of the size of subject departments and the number of groups of students undertaking the same work in parallel which requires, in some cases, very extensive duplication of titles. We have regard to College A's practice of making 1 copy of a title available for every 12 students beyond the first, up to a maximum normally of 7 or 8 copies. Such demand is also met of course by widening the range of titles and by successive instead of concurrent teaching of groups, though college timetables often make this difficult. We had regard also to the percentages spent on duplication at College A and elsewhere, if these were available. The following are the proportions of duplicated stock reported by some colleges and which they purchased in the year, or part year, 1971/2. They can be compared to the figure of 12.8% obtained from College A's book selection exercise.

	%
College C	11.9
E	13.0
F	3.6
G	9.0
H	10.8

Most colleges find it hard to state a cut and dried policy, but some librarians prefer to use variable loan periods, including restricted loan collections and/or the widening of the range of titles, and cooperation with teachers in spreading the demand over a longer period of time, rather than excessive duplication. Also checks in College A on the amount of use of duplicates show a diminishing return in point of use of multiple copies, which may only be used to meet peak demands once a year. If, as a result of our research, larger bookgrants are made available, it should be possible to widen the range of titles and reduce the need for large amounts of duplication of a smaller number of titles. We have, therefore, been cautious in assigning weighting in points to the duplication factor. As will be seen in Appendix III A.4 the percentage of the total points allocated in sections A5, B5, C3 and 6 concerned with this factor varies according to college teaching policies, thus:-

	%		%
College A	9.98	E	4.67
C	4.26	F	6
D	4.1	G	2.45

When added to the options/special studies factor, the following percentages show that this factor and the duplication factor together ammount for the following proportions of the total grant at the six colleges in the list.

TABLE 4 Possible bookgrant formula applied to College A (1550 students). Based on data concerning book prices, courses, options, student numbers etc. for 1971/2

Factor	Basis for calculation of points	% of total	No.	Points	Total Points	Money Value £
A. Certificate Courses. Basic allocation						
1. Bookish or high unit cost	Number of subjects (1)		5	10	50	1100
2. Both bookish and high unit cost			5	15	75	1650
3. Neither			8	8	64	1408
4. Addition for number of parallel options in all main subjects beyond the first, after the 1st. year. Added to this 1 option for every 10 special studies beyond the first 10.	Number of options	27.45	A1 15	1	15	330
			A2 27	1.25	34	748
			A3 9	.75	7	154
5. Addition for duplication and extension of range because of student numbers in main or subsidiary subjects	Groups of 12 students beyond 1st.12 in any one year.		110	.5	55	1210
Total					300	6600
B. B.Ed. Courses Basic allocation						
1. Bookish or high unit cost	Number of subject courses offered		5	8	40	880
2. Both bookish and high unit cost			5	11	55	1210
3. Neither			8	7	56	1232
4. Addition for parallel options beyond the first, after 1st. year, if not covered above	No. of options	19.9	B1 13	1	13	286
			B2 20	1.25	25	550
			B3 5	.75	4	88
5. Addition for duplication because of student numbers	Groups of 12 students beyond 1st 12 in any one year		49	.5	24.5	539
Total					217.5	4785

C.	Education & Professional or Curriculum Courses						
CERT.	1. Basic certificate studies	Cost of basic annual purchases			50	50	1100
	2. Addition for options in 2nd or 3rd year	No. of options		15	3	45	990
	3. Addition for duplication in all years	per 50 students		21	1	21	462
B. ED.	4. Basic B.Ed. studies	Cost of basic annual purchases	17.15		32	32	704
	5. Addition for options and special studies in 4th year	Number of options		8	3	24	528
	6. Addition for duplication in 3rd & 4th yr.	per 12 students beyond first 12		17	.5	8.5	187
PGCE	7 Basic Postgraduate course	per 10 students		14	.5	7	154
	Total					187.5	4125
D.	General Background, reference and bibliography books	as a% by common experience	6.04			66	1452
E.	Subsidiary or second subjects not covered above	per subject	1.37	1	(2) 15	15	330
F.	Special courses	per course, librarian's estimate	1.46	2	(3) 8	16	352
G.	School services materials, textbooks, children's books at four levels, Nursery/Infant; junior; secondary; 6th form.	per level per 50 students	7.96	4 31	14 1	56) 31) 87	1914
H.	Periodicals	as a % by common experience	12.27			134	2948
I.	Conservation and binding	as a % by common experience	6.4			70	1452
	Total		100			1093	24046
J.	Less % reduction for medium and large colleges at 1% per 100 students beyond 500		10			109	2398
K.	Plus % addition for geographical isolation, measured by score in attached appendix					Nil	
L.	Plus % addition for a second library with a separate stock - at librarian's discretion					Nil	
	Total					984	21648
M.	Audiovisual materials to be added as a supplement where appropriate						1000
N.	Cost of ILL and photocopying (Librarian's estimate)						500
				FINAL TOTAL			£23,148

N.B. An initial basis of 1000 points was assumed as a starting point.

(1) Includes European Studies = 3 subjects (French, German, Russian) Science = 3 subjects (Chemistry, Physics, Biology) Art and Design is given double weighting because of unit costs 75% above average

(2) This is Modern Studies which needs a wide range of literature.

(3) There are two such special courses; Compensatory education, and the course for the Teaching the severely sub-normal

		%		%
College	A	25.25	E	17.03
	C	15.04	F	12.66
	D	11.8	G	18.07

This partly reflects size, but more the way the college organises its courses, teaching and study, reflecting the range and spread of courses as well as the number of groups working in parallel on the same materials.

In relation to subjects we decided to recognise the very important fact that some depend entirely on library materials as their main source for information and learning - and these we have called "more bookish" subjects. For others there is strong evidence of above average unit costs. In the basic allocation of points to subjects, and for the allowances from options/special studies we have used a differential weighting arrived at by experiment which has been generally approved. Table 4 shows how this was applied at College A. The allocation of points to Certificate subjects was made higher than for B.Ed. subjects because B.Ed. funds are normally intended to cover additions over and above the basic material provided for Certificate studies - the proportion being made to reflect the facts shown in Table 1 and the wishes of librarians. Differing proportions arise for categories A and B according to whether there is more or less B.Ed work and according to numbers of subjects studied (see Table 1 in Appendix III A.4)

In Section C basic Certificate and B.Ed. requirements are separated, and weighted with the number of points which gives an acceptable and fair result to all six colleges. Because all students take education, the allocation for duplication and extension is related to groups of 50 students for Certificate students, but because of the smaller numbers involved, to groups of 12 for B.Ed. students. All professional and curriculum literature requirements are covered in this area, and the points allocation for groups takes account of this, while the points allocated for options or the equivalent of options are awarded a larger points allocation (3 instead of .75 to 1.25), because of the greater depth and amount of time spent on these studies, specialism and the extent of the literature required. Where applicable, a further small points allowance is made as part of C to include the needs not otherwise covered of postgraduate certificate or diploma students, for example, curriculum and teaching method in areas only required by graduates, e.g. classics, economic history, additional modern languages, more advanced curriculum work to sixth form or further education level in other subjects. Where B.Ed. courses extend over a period longer than a year, this is covered in the formula where group allowances can be obtained in the 3rd year as well as the 4th year. B.Ed. options/special studies in education are only thought to have sufficient weight in extending coverage in the final year, but may qualify for points in main subjects in any year after the first, if not covered by certificate courses in the same area of study. Section C, taken as a whole, reflects the proportion of total effort which goes into this area of college work and naturally occupies a higher proportion of the bookgrant in the smaller colleges; the highest proportion in Appendix III A.4 is 24.1%, the lowest 17.15%.

Investigations were conducted into College A's expenditure in 1971/2 (details are in Appendix Part III A.3) and some analysis and discussions at other colleges took place, from all of which the following lists of subjects more book based than average, and 25% above average unit costs were agreed.

More book based than average

- American Studies
- English
- Geography
- History
- Language and Linguistics (if separate from English)
- Modern Studies
- Psychology (if separate from Education)
- Religious Studies
- Sociology

25% above average unit cost

- American Studies
- Art and Design (given double points allowance, i.e. 15 points Certificate and 11 points B.Ed.)
- Drama
- Education
- English
- Language and Linguistics (if separate from English)
- Music
- Psychology (if separate from Education)
- Reference works and Bibliographies
- Sociology

History and Physical Education came within 6p of being 25% above average unit costs and have, therefore, been regarded as high cost subjects. Science, we regard as a borderline case, to be determined by the level of courses followed at a particular college. At certain colleges it is above average cost.

It will be noticed that education and curriculum unit costs at £2.27 are now 25% above average, whereas in Table 1 the unit cost was £1.67, i.e. close to the overall average. Table 1, of course, is concerned only with BNB mainly British items. In 1971/2 many American items were being purchased by College A and these are usually costly and also there has been since 1969 an increase in the more expensive educational technology and curriculum items. We have taken note of this in deciding basic allocations for education at Certificate and B.Ed. levels with which curriculum and professional studies are included.

18. Sections D - N of formula

Sections D, H and I have already been discussed in Sections 4, 11 and 12 and we therefore gave them the appropriate percentage value which each college converts into points in relation to the total points received from A + B + C, which represents from 60.1% to 69% of the total expenditure, depending on how far a college's work spreads in its school services library, additional subjects or special courses.

Section G, School Services materials, is an important one in colleges of education and is treated independently of A + B + C. The weighting assigned to this part of a library's requirement amounts to 7.96% in the calculations in Table 4 for College A, corresponding to 8.41% in the desirable expenditure for 1969 in Table 1. We are here considering children's books and text books and other printed materials for use in schools at all levels. Not all colleges cover all levels of school age, so requirements were divided into four levels, nursery/infant, junior, secondary and 6th form, and points were allocated for basic material at each level. So as to cover the need for duplication arising from large numbers of students wanting the same material, for courses in children's literature and other demands, a further points allowance based on student numbers similar to that applying in Section C, was used. The two sub-factors together, thus reflect the needs of different colleges which, in fact, claim the following percentages:-

		%		%
College	A	7.96	E	10.9
	B	8.46	F	7.17
	C	10.64	G	13.18
	D	8.55	H	12.29

This shows that a mere single percentage allowance would not allow a close enough approximation to college needs for College F claims for only 2 levels, the rest each claim for 4.

Section E is intended to allow for the small number of subjects forming part of the Certificate requirements not covered in A, B or C e.g. a subsidiary subject not taught at main or B.Ed. level or collegial courses not otherwise covered, which could best be left to the librarian's estimate or treated as half the value of a 2 year subsidiary course.

In Section F provision is made for other specialist courses, e.g. Diploma in Compensatory Education, or Diploma for teaching of Severely Sub-Normal Children or Mentally Handicapped Children. Here, because of the widely differing literature requirements, a librarian's estimate is recommended to cover materials not already covered anywhere else in the formula.

Section J provides reductions arising from economies in size on a more gentle gradation (1% per 100 students beyond the first 500) than either the DES or ATCDE/LA formulas which rely too much on abrupt steps.

We have seen earlier (Sect.2) that the two existing formulae both provide for a reduction which seems too drastic for the larger colleges. There are obviously economies to be expected from size because it is easier to absorb the costs of expensive items, e.g. encyclopaedias or very expensive textbooks in the spending of a large department than that of a small one. But, the consensus of opinion is that this should not amount to more than 10% for a college of 1500 students, and that there should be no reduction until the college has over 500 students. Our formula therefore provides for reductions ranging from nil to 10% according to the size of the colleges to which it is applied.

To measure geographical isolation, we took the situation of Colleges A and F, both well served by good municipal libraries, and reasonably near to University library facilities, as being as ideal as any colleges are likely to be. To measure additions needed for college libraries more isolated than this, we devised the following Table 5 which rewards good facilities with points, and allows larger claims to be made by colleges with fewest points.

TABLE 5 MEANS OF MEASURING GEOGRAPHICAL ISOLATION

Type of Library	Available for Reference for		Available for loans by	
	B.Ed. Students	Cert. Students	B.Ed. Students	Cert. Students
University library				
School/Institute of Education library				
Large public reference library of good quality			▨	▨
Good central library				
Good branch library				
Good local authority education library				
TOTAL				

1 point is allowed for each facility, librarians being the judge of good quality, if the facility is within 10 miles of the College, and feasible transport exists. If more than 17 points accrue, no allowance should be claimed. The word 'good' implies a standard equivalent to that of a large city library service.

13-17	points	add	2%
8-12	"	"	5%
4-7	"	"	10%
0-4	"	"	20%

This scale is based on a consensus view of the librarians concerned.

In the case of day colleges, these percentages should be reduced to half in urban areas, because students have a base at home as well as at college and frequently are able and prefer to use library facilities outside the college. (See Part V A, Sections 7 to 9)

Thus the cost of making library provision at an advanced level in isolated colleges, is much heavier per student if this method of measurement is used.

Section L would apply in the case of outposts or branches away from the main campus. We have not enough firm data, as stated earlier, to recommend definite percentage or points allowances for Sections M and N, and these are, therefore, left for librarian's estimates.

TABLE 6. ESTIMATES FOR EXPENDITURE ON BOOKS AND PERIODICALS: Pro-forma for making a claim. N.B. for 1971/2 1 point = £22.

College A | No. of students 1550 | No. of staff 150

		No.	Points for each	Total Points	Money Value £
	A. Certificate courses				
	1. Basic allocation, *number of more bookish subjects or above unit cost subjects		10		
	2. Basic allocation, ** number of subjects with both factors		15		
	3. Basic allocation, number of other subjects		8		
	4. Addition for number of parallel options beyond the first after 1st. year in all main subjects. To this add 1 further option for every 10 special studies beyond first 10.		For A1 1.0 A2 1.25 A3 .75		
	5. Addition for duplication and extension because of student numbers in main and subsidiary subjects. (Calculate in groups of 12 beyond first 12, i.e. ignore first group of 12 taking any alternative).		.5		
	TOTAL				
	B. B.Ed. courses				
	1. Basic allocation (*see above)		8		
	2. Basic allocation (**see above)		11		
	3. Basic allocation, number of other subjects		7		
	4. [illegible]ition for number of options after 1st. year beyond the first, not covered [illegible]ove		B1 1.0 B2 1.25 B3 .75		
	5. Addition for duplication and extension (as in A.5 above)		.5		
	TOTAL				
	C. Education, professional curriculum courses				
CERT.	1. Basic certificate studies			50	
CERT.	2. Addition for number of options in 2nd. or 3rd. years		3		
CERT.	3. Addition for duplication and extension in all years, per 50 students (number of such groups beyond first).		1		
B.ED.	4. Basic B.Ed. studies			32	
B.ED.	5. Addition for number of options and special studies in 4th. year		3		
B.ED.	6. Addition for duplication and extension, in 3rd and 4th. year (number of groups of 12 beyond first 12)		.5		

7.	PGCE Basic for postgraduate course per 10 students		.5		
	TOTAL				
	TOTAL A + B + C				
D.	General background, reference, bibliographies. 9.4% of total A + B + C above				
E.	Subsidiary or second subjects not covered above: per subject		12		
F.	Special courses, librarian's estimate				
G.	School services materials, 14 points f[illegible] each level (infant; junior; secondary; 6th. form) + 1 point for 50 students to cover duplication need		14 1		
H.	Periodicals 19% of A + B + C above				
I.	Conservation and binding. 10% of A + B + C				
	TOTAL				
J.	Deduct: 1% per 100 students beyond first 500 for medium and large colleges				
	TOTAL				
K.	Add 1% addition for geographical isolation (see Table 5)				
L.	Addition for second library with separate stock (Librarian's estimate)				
	TOTAL				
M.	Audiovisual materials (Librarian's estimate)				
N.	Cost of ILL and photocopying(Librarian's estimate)				

FINAL TOTAL

19. A formula which uses a points system of weighting

Supposing that these means of measuring are valid and that the weighting assigned to the various elements is correct, we can now present a claim for a desirable bookgrant for College A for 1971/2 as shown in Table 4.

This table shows the number of points assigned to different courses and interests and the basis on which the total of 984 points was arrived at.

According to our research based on BNB 1969, the college bookfund should have been £16,280.

But to arrive at the correct figure for 1971/2 £1,6280 must be updated by 27% which is the average increase in library bookfunds allowed by the DES between College Letters 6/69 and 1/71. Thus the total is increased to £20,676.

By dividing £20,676 by 984 points a value of £21.01 is reached for each **point**.

However, the 27% increase allowed for the increase in the cost of materials was certainly an underestimate of this real rise in prices because, between 30th June 1969 and 30th June 1971, the average price of all books appearing in BNB went up by 33% and the average price of all British and foreign journals almost doubled. It is not unreasonable, therefore, to round up the value of the point to £22.0. This makes the final total claim £21,648 excluding costs of ILL and of audiovisual materials.

The amount actually obtained for 1971/2 was £14,046.

We have now shown how the total sum derived from research into the real needs of various courses and interests at College A has been used as the basis of a system within which weighting of the chief variable factors is achieved by means of a points allocation.

20. Application of the formula to the needs of the 8 cooperating colleges

Table 6 shows the pro-forma which was used following the experiments at College A and the discussions with the other 7 colleges to obtain the data needed.

All the cooperating colleges collected information on the same lines as College A (Appendix III A.5 gives an example of the form used at College A completed by one department). Much discussion took place on our second visit to the colleges and in subsequent correspondence. The experimental allocation of points to the various factors was thoroughly discussed, and some modifications and improvements were made. The resulting information has been condensed into a table showing the number of points claimed under each section of the formula in six of the eight colleges. In two of the colleges because of the great individuality of lecturers' programmes or the very large number of individual small groups it proved impossible for them to quantify their requirements in point of options or groups at any level. The result is shown in Table 1 of Appendix III A.4. College librarians have in general approved the proportions claimed by the various parts of the formula which broadly speaking reflect their present practice or what they would like to do if they had more to spend. Moreover a number of college librarians beyond our seven sample colleges have also been consulted and have on the whole given their support as well as helpful comments. For example, the claim for school services materials at College G (13.18%) comes close to the percentage actually spent in 1971/2 (11%). College librarians also support the need for the level of expenditure which results from our formula.

Table 2 of Appendix III A.4 shows how the formula was eventually applied in all eight colleges. From the results supplied by six colleges a method was arrived at of converting those elements in the formula concerned (i.e. in Parts A, B and C) with options, groups and student numbers, into an allocation by points according to student numbers only. It was found that if 12 points were given to every 50 students, beyond the first 400, the closest approximation to the result of the full formula in the six college returns was achieved. Most of the college librarians agreed that this simplification of the claim form was acceptable, though it did not reflect so exactly college requirements and teaching methods, nor can it help the librarian so much in his delicate task of dividing his bookfund to meet the various needs. The original formula through its basic allowances at Certificate, B.Ed. and Education/professional levels at A 1-3, B 1-3, C 1 and C 4 covers the requirements of a small college of 400 students with its small number of academic subjects offered, and very little spread of options and parallel groups. After this, requirements for the widening of courses and for larger numbers of groups doing the same course grow very roughly in proportion to student numbers. This was the thinking behind the ATCDE/LA formula which, in its B.Ed. proposals, gave basic sums for every main subject and education backed up by an additional per capita grant. The number of 400 students, therefore, seems the right amount at which to start adding to cover the spread of courses.

Line X in Table 2 of Appendix III A 4 represents the closest we can come to reflecting the main actual categories of need in the six colleges able to supply full information, while Line Y offers a simpler but still acceptable substitute for all colleges.

The general conclusion from the result of these experiments is that the various chief factors in the formula reflect the needs of eight different colleges in a reasonable and acceptable way and that they could make annual claims using the form shown in Table 7. The alternative claims forms need testing in a larger number of colleges. We must leave open to further debate the question of whether it would be better for colleges to use the more detailed form shown in Table 6 and whether librarians want to use the data in Table 6 for purposes of allocating the fund within the college.

Some important considerations are brought to light in the discussion of the application of the various factors in Appendix III A.4. We have already discussed in Sect.4 how the CELRP formula gives the necessary greater weight to B.Ed. requirements in College A. The formula faithfully reflects the bookgrant costs consequent upon a large number of different subject courses, and especially a large number of B.Ed. subject courses where basic material is needed as much for 2 as for 20 students. For example, the additional cost per B.Ed. student in College A with its large numbers is £12. in all years, and in College H, with its comparatively large number of subjects offered (9) and small numbers of students - £118. The formula also reflects the needs arising from a 1 + 3 or 2 + 2 type of B.Ed. course because it takes account of separate courses in both 3rd and 4th. years. Likewise, colleges with the same number of students may have widely different book requirements according to the number of courses taken and how many of the more bookish and above average unit cost subjects they take. For example, College D offers many more B.Ed. subject courses than the larger Colleges B and C and College F, though smaller than E, offers more B.Ed. subjects. College G offers fewer subjects at Certificate level than College F, though of similar size, including only one subject which is both bookish and above average cost. Thus its points claim in Section A is much less than College F's.

There are considerable variations also resulting from the special collegiate or inter-disciplinary courses offered, and the age groups students are being trained for, the latter resulting in different school services requirements. The effect of scaling down by size and relative geographical isolation from other libraries is also shown. For instance, book requirements are 20% greater for the most isolated college, and it is shown to be relatively expensive to mount large numbers of different courses for small numbers of students, especially in isolated colleges.

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matter is discussed elsewhere in our report. Suggestions for new library purchases are welcomed from students in college libraries, but they do not seem to be very frequent at present.

The librarian's skills as a bookman now need enlargement. Not only must the library team be responsible for selection, keep up with forthcoming as well as current publications, visit bookshops and check secondhand lists, experience the thrill of finding for the library an important rare item, and understand the rapidly growing reprint and microform publications; but also they must extend their knowledge of resources beyond printed materials to the rapidly growing range of pictorial and recorded materials, and to the specially produced kits, which are particularly important in connection with curriculum development and the professional training of teachers. At present, purchase of audiovisual materials accounts for a small proportion of total funds, (11% is the highest level in our 8 colleges), but this proportion is likely to increase. The work of selection in the whole field of learning resources can now only be successfully achieved by the bringing together of different kinds of expertise, and by arriving at a fair balance of expenditure on the different types of material in relation to the current college teaching programme and priorities. The library staff must, however, still supply much of the dynamic needed in this whole area. Because of other research work in the field we have not considered in detail the methods or success of selection of non-book materials.

This survey has no conclusions to offer except that more time must be available for the wise selection of materials, and that there are great advantages in subject specialisation within the necessary close cooperation between library and teaching staff. We hope that the effect of this part of our report will be to cause librarians to reconsider their present practice of selection and to decide whether any of the activities described in our survey would help them to improve it. We hope also that more time for close liaison with teaching staff will result in more informed choices being made, a reduction in gaps in coverage, and a closer dovetailing between what lecturers advise students to read and what provision the library makes to meet their needs.

Reference

Humphreys K.W. The Subject Specialist in National and University Libraries Libri 17 1967.

See also Section 3.

TABLE 7. ESTIMATES FOR EXPENDITURE ON BOOKS AND PERIODICALS:

Pro-forma for making a claim.N.B. for 1971/2, 1 point = £22.00

College________________ No. of students.________ No.of staff______

	No.	Points each	Total Points	Money Value
A. Certificate courses.				
1. Basic allocation,*number of more bookish subjects or above unit cost subjects		10		
2. Basic allocation ** number of subjects with both factors		15		
3. Basic allocation, number of other subjects		8		
B. B.Ed. courses.				
1. Basic allocation (*see above)		8		
2. Basic allocation (**see above)		11		
3. Basic allocation, number of other subjects		7		
C. Education, professional, curriculum courses				
1. Basic Certificate studies		50		
2. Basic B.Ed. studies		32		
3. Basic for Postgraduate course per 10 students		0.5		
4. Allowance to cover spread of options or equivalent special studies, number of groups undertaking the same studies. Per 50 students on college roll beyond the first 400 ignoring groups of less than 50		12		
TOTAL A + B + C				
D H & I. General background, referance and bibliography books; periodicals; binding & conservation. 38% of A + B + C				
E. Subsidiary or second subjects not covered above, per subject: 2 year course		15		
1 year course		7.5		
F. Special courses, librarian's estimate				
G. School services materials. 14 points for each level (infant: juniors: secondary: 6th form)		14		
+ 1 point for 50 students to cover duplication needed		1		
TOTAL A - I				
J. Deduct 1% per 100 students beyond first 500 for medium and large colleges				
TOTAL A - J				
K. Add % addition for geographical isolation (see Table 5.)				
L. Addition for second library with separate stock (Librarian's estimate)				
TOTAL A - L				
M. Audiovisual materials (Librarian's estimate)				
N. Cost of ILL and photocopying (Librarian's estimate)				
FINAL TOTAL				

21. Comparison of the application of CELRP formula with those of other formulae and considerations arising.

In Table 2 of Appendix III A.4 are given comparative figures showing what the eight colleges would receive from the ATCDE/LA formula updated by the addition of 57% for the general funds for the period 1966-1971/2 and 37% for the B.Ed. funds for 1968-1971/2. The sums which colleges could claim with the DES formula for 1971/2 are also given. If these are compared with the amounts produced by the claim form shown in Table 7 by the CELRP formula, the following percentages in Table 8 result for the eight colleges. The table also shows the differing costs per student in eight colleges.

TABLE 8. COMPARISON OF 3 FORMULAE FOR BOOKGRANTS 1971/2

Coll.	Student Nos.	No.of B.Ed. Students.	CELRP Amount £	Cost per Student £	%	ATCDE/ LA Amount £	%of CELRP Amount	DES Amount £	% of CELRP Amount.
A	1550	4-103 3-114	21648	13.96	100	18757	87	13501	62
B	930	80	18678	20.08	100	12384	66	9536	51
C	970	4-36 3-40	17676	18.22	100	12632	71	9759	55
D	875	70	18706	21.38	100	13011	70	8907	48
E	876	28	15422	17.60	100	11296	73	7211	47
F	780	18	13039	16.71	100	9494	73	7294	56
G	720	25	11025	15.31	100	9530	86	8130	74
H	445	4-4 3-3	10956	24.62	100	7352	67	5091	46

These figures ignore the cost of audiovisual materials and ILL. Where only one figure is given for B.Ed. students it represents those in the 4th. year only. Some colleges run a 1 + 3 B.Ed. course, some 2 + 2, some 3 + 1.

It is clearly seen from this table that one could not achieve the level of provision required by the CELRP formula merely by adding 100% to the DES formula or 37% to the ATCDE/LA formula. The costs per student of the CELRP provision vary widely, and the amounts claimable by the other two formulae, when expressed as percentages of the CELRP amount, vary greatly. A 100% increase on the present DES formula would give almost exactly the amount we recommend to one college (College B), but some would require a greater increase, i.e. Colleges D, E and H, some a smaller increase, i.e. Colleges A, C, F and G. The ATCDE/LA formula comes closest to College A's requirements partly because it more generously reflects the amount of B.Ed. work done there, and partly because there is no reduction at 1000 students in the ATCDE/LA formula though there is in the DES formula. Elsewhere it varies between 66% and 86% of the CELRP amount, and this shows it is much closer to the needs of the situation than the DES formula. However, it could still not easily be upgraded by a certain percentage to produce the same effect in all eight colleges as does the CELRP formula. If our allocation of points is based on a sound appraisal of college library needs then they can only be given expression by a more sophisticated formula such as the proposed CELRP formula. Both the present formulae are too crude in application and too closely linked to student numbers, though they do reflect in part the effect of having large or small numbers of students undertaking B.Ed. studies. The ATCDE/LA formula, because of its provision per subject (see Section 2) and allowances for both 3rd and 4th year students does allow greater weight to be given to B.Ed studies than the DES formula. This shows clearly in the relatively higher figure produced for College A.

Using line Y in the CELRP formula as in Table 7 has the effect of providing a basic minimum bookfund for even the smallest college, because points allowances are made at Certificate and B.Ed. level (if applicable) for basic provision in every subject, and in education and professional studies. If the college has fewer than 400 students it requires no additions beyond the basic in A B or C. The rest of the formula applies minimum standards to all the other factors, some of them being based on A + B + C. Thus a college of 364 students studying 6 main subjects at Certificate level only and 3 at B.Ed. level, and with no additional second subjects or special courses or graduate students and preparing only primary students, would receive for 1971/2:-

	points	£
A1 (2 subjects)	20	440
A2 (2 subjects)	30	660
A3 (2 subjects)	16	352
B1,1,3 (3 subjects)	26	572
C1	50	1100
C2	32	704
A + B + C	174	3828
D H I	55	1210
G	21	462
J	Nil	Nil
Total A - J	250	5500
Add 10% for likely geographical isolation (K)		550
		£6050

Again this ignores the cost factors of audiovisual materials and ILL.

22. Possibility of rationalisation of college requirements

If the CELRP formula were adopted on a national scale as a means of claiming bookfunds questions are mostly likely to arise concerning possible limitations on the number of subjects offered at Certificate and B.Ed. level, and recommendations on minimum student numbers per course for viability and the wisdom of concentrating the teaching of less popular subjects and special courses, including postgraduate courses in certain colleges. It is not appropriate for us to make any recommendations since a wider debate involving teaching costs and many other considerations is required. If regional authorities are established rationalised use of expensive resources will probably be one of their concerns. But controls, if introduced, could restrain claims made under the CELRP formula for, for example, B.Ed. subject courses or special courses. The high cost of library requirements on the site or obtained through ILL for colleges which are very isolated from other resources is another factor which might need to be considered.

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Even if rationalisation reduces the effect of requests for bookfunds on the scale we are advocating, we believe that the addition of new materials on a larger scale to college libraries will have serious implications for the staffing of the libraries which have to select, acquire and process them, and for accommodation in which to store them. Although some requirements can be met through ILL or by sending students elsewhere, the experience of all librarians we have consulted is that a very high level of self-sufficiency in provision is needed, and materials must be available on the spot at the time they are wanted. Our research was unable to cover the future problems of accommodation for college libraries. The trend towards more and more individual study, and study requiring the use of materials in very many different media, the enlargement of libraries into resource centres, and the greater depth of studies likely in the future, as well as the larger annual intake resulting from the improved bookgrants which we recommend, all point to the need for very much larger college libraries in the future. Research is certainly required to establish probable growth rates and future size of stocks in college libraries, with perhaps regional stores for little used materials transferred to a designated regional research library, so that colleges only need to retain a large collection of currently active and useful material.

23. Use of formula for allocation within a college

If libraries ask for money using the full formula shown in Table 6, they also have a ready made means, if they wish, of allocating funds to the various main elements - to the Education Department, to the main subjects at Certificate and B.Ed. level, to special courses etc., in proportion to the weighting assigned to them in the formula. We hope this also will enable college librarians to deal more fairly with competing claims. A survey of college libraries conducted by the Library Association in 1970 showed that of 142 colleges who made returns, 30 allocated their bookfund to subject departments, 63 partly allocated them, and 35 did not allocate them at all. Certainly several of the largest colleges have found this a difficult problem, and often some action needs to be taken for the sake of students to encourage reluctant departments to make proper provision of resources. Some parallel work to ours in this field is described in the article by Ramer and Boykin, The book budget in academic libraries.

For the financial year 1972/3 at College A the CELRP bookfund formula has been accepted by the Educational Resources Committee and the Academic Board as the fairest means of allocating the money available from the existing DES formula. Much acrimonious debate has been avoided because colleagues felt the percentage allocations were based, as reasonably as any formula can be, on the crucial facts of the situation. A copy of the letter by which the original information was collected and the full report made to the Academic Board is included in Appendix IIIA.6. The first percentage column of Table 2 in the same Appendix shows the effect on allocation of using the CELRP points system. Since at the moment subject departments in the college have considerable curriculum responsibilities and are required to order books on curriculum and teaching method in their subjects, the distribution of funds was weighted further to correspond to this additional load, and the result appears in the final percentage column. A further slight adjustment was made to this column because College A felt the English Department, which is very large, should make some economies from its size and therefore the excess over our allocation in the previous year was distributed to some departments who had not been able fully to quantify their requirements in the option part of the formula. A small sum was set aside as a reserve to meet unforeseen contingencies. The report shows that the CELRP full formula (Table 6) was judged to offer the best help to fair allocation so far available. We hope that other colleges will find this method helpful. The success in College A gives some validity to the points system.

24. Annual updating of formula and future adaptation

The use of a formula such as we have described for college bookgrants will require an annual updating of the value of the point. With the aid of the report which appears in the LAR for book and periodical prices, and the selection of the appropriate areas for college bookstocks the percentage increase in one year can be ascertained. Taking 1971/2 as a baseline with the point valued at £22., a percentage increase or decrease can be made year by year at the time the College Letters setting the level of bookgrants for voluntary colleges are produced. Many maintained colleges successfully use this guidance in preparing their own budgets which are often begun in June for presentation along with the rest of the estimates in October or November to the Governors, then the Education and Finance Committees and the Council.

The working of a points system would require review as college functions and courses develop. Proportions may need changing, new categories may need to be added, and old ones deleted. Some more definite allocation may be needed for cross discipline, or integrated courses, where these involve new literature requirements, e.g. environmental studies, or literature and society, or contemporary studies, though for the most part the literature requirements of such courses are covered by the allocation to more traditional subjects - History, Geography, English and the new subjects, Sociology, American Studies, European Studies. If, for instance, the full proposals of the James Committee were to be implemented it would not be difficult to adapt our recommended claim form. Section A would also be concerned with Diploma in Higher Education courses, again measured by means of independent subjects offered, with part allowances for integrated studies; Section B could remain concerned with degree work, (if any,) other than degree work in Education, with allocations by subject; Section C would include college responsibilities for all James second and third cycle courses, including part time B.Ed. courses, as well as all education, curriculum and professional elements of full time diploma and degree courses. Most of the other sections would need to remain, including the allowances for the School Services Library. For the calculation of allowances based on groups or student numbers parttime students might well be counted as half time, but degree students as full time, since it is the experience of some colleges that they make heavy demands on libraries.

There remains a need in this as in many other areas of our research for continuing research and the availability of an agency which, in response to changed circumstances, can test and amend recommendations made by our initial research. We expect that in due course a formula of the sort we recommend would need to be extended to include materials in all forms, but it is too soon at present to make firm recommendations in this area.

25. Summary

We hope that our investigations will lead to a better understanding of the main factors of need in the supply of materials for college of education libraries. We hope our report highlights the most important of these elements, e.g. the requirements of the B.Ed. degree course, the consequences of school services library provision and the effect of professional training. We hope too that the detailed discussion of various points in the main report and appendix will prove useful. The discussion of unit costs and the proportions of various requirements has already proved helpful to some of the cooperating librarians. We believe that further debate is necessary to establish which of our two methods of claiming bookgrants is most suitable and whether the more detailed method of Table 6 is better for colleges who can quantify their needs this way and furthermore wish to use the same information, updated annually, to provide a basis for the allocation of funds to the various departments and sections of demands.

We therefore recommend that consideration be given by the DES and local authorities to raising the level of bookgrants to that which would result from the application of the two methods of claiming by means of the points system we suggest. The effect of this would be to bring college bookgrants to something close to 3% of average tuition costs instead of 2.o4%. The claim form in Tables 6 or 7 would need to be used and the value of the point updated in relation to book and periodical prices. The effect of this increase would need to be borne in mind in relation to our findings on library staffing. The cost of increases in library bookgrants should also be considered in relation to the appropriate levels and methods of administration of grants to students for the purchase of books, materials and stationery. These are discussed elsewhere in this report.

Not only should the overall level of bookgrants be reconsidered, but also the need to produce flexible, fair and practicable ways, such as the formulae we have demonstrated, of measuring college library requirements. These attempt to measure the weight which should be attached to the chief variables in the demand. If there is agreement upon the factors we have chosen and on the means of measuring them, clear definitions of the sort we provide in Appendix IIIA.3 will be needed, together with a table, such as Table 5 (Sect.18) for measuring geographical isolation. It will be necessary also to ensure that if part of library bookfunds are used to pay a public lending right fee the amount of this should be added to the totals required by our formula. Likewise, where colleges receive substantial amounts of discount adjustments by reduction of claims may be made.

References

Cadney, D.	Finance and bookstock. Chapter 6 in College of Education Libraries Library Association 1972
Clapp, V.W. and Jordan, R.T.	Quantitative criteria for adequacy of academic library collections. College and Research Libraries. September 1965, pp.371-380
Interinstitutional Committee of Business Officers (Washington University & others)	A model budget analysis system for Program 05 libraries. Evergreen State College, Washington, Marh 1970.
McGrath, W.E.	Determining and allocating book funds for current domestic buying. College and Research Libraries, Vol.28 - 4 July 1967 pp. 269-272
McGrath W.E. & others	An allocation formula derived from a factor analysis of academic departments. College and Research Libraries, Vol.30 1 Jan. 1969 pp.51-62
Massman, V.F. & Patterson, K.	A minimum budget for current acquisitions College and Research Libraries. Vol.31 No.2 March 1970 pp.83-88
National Union of Students	The education and training of teachers: perspectives for change. Memorandum submitted by the National Union of Students of the United Kingdom to the Committee of Enquiry into the education and training of teachers under the Chairmanship of Lord James of Rusholme. May 1971. para. 191
Ramer, J.D. & Boykin, J.	The book budget in academic libraries. Southeastern Librarian. Spring 1966 pp. 40-43 (especially useful for allocation of money to meet different types of need).
Roberts, N.	College of education libraries: a cause for concern in J. Librarianship. 3(3) July 1971.
Schad, J.D.	Allocating book funds: control or planning - College and Research Libraries. Vol.31 - 3. May 1970 pp. 115-159.
University Grants Committee	Report of the Committee on libraries. H.M.S.O. 1967. (Parry Report.)

Association of Teachers in Colleges and Departments of Education and the Library Association.	College of Education libraries: recommended standards for their development ATCDE/LA 1967.
Association of Teachers in Colleges and Departments of Education and the Library Association.	Interim recommendations on additional book grants for college of education courses leading to B.Ed. degrees ATCDE/LA 1969.
Department of Education & Science.	College letters 2/68 Library bookstocks and bookfunds in colleges of education, DES 1968 6/69 Voluntary college estimates 1969/70 DES 1969 4/70 Voluntary college estimates 1970/71 DES 1970 1/71 Voluntary college estimates 1971/72 DES 1971 7/72 Voluntary college estimates 1972/73 DES 1972

PART III B METHODS OF BOOK SELECTION

1. Introduction

In the previous section we investigated a possible basis for the book-funding of college libraries. It is also important to examine the methods used for book selection. The successful selection of stock is essential if the library's objectives are to be fulfilled. It is especially relevant to the First Objective (see Part I, section 15), i.e. to provide appropriate materials, and part of the Second Objective (see Part I, section 14.4 to 14.6), i.e. the provision of bibliographies, directories etc. and the maintenance of links with book shops and other relevant agencies.

2. Background Information

Academic libraries have to select, within the framework of an annual grant, the right items from an increasing output of new materials and the great reservoir of older materials still in print or available secondhand. CELRP did not have time for a full investigation of all aspects of book selection. It seemed best to investigate methods used in the eight cooperating libraries and perhaps bring to light good practices where they could be found and reveal the chief areas of controversy or difficulty. It is the purpose of selection to choose the best material to meet the needs of a course or interest. Whether students and staff use these materials sufficiently to justify purchase is another question which relates to teaching method, library knowledge and skills, and motivation to study. (See Part II Sect. 9). Likelihood of use, however, must remain in the mind of the selectors especially when they are considering levels of difficulty in the content, questions of multiple demand, and popularity of a subject.

3. Some recent literature of book selection

Since this is a very important area of library activity, it is surprising that there does not appear to be very much writing in professional journals on this subject. By way of introduction we summarise the chief articles or chapters in books since 1969.

Chapter 7 of the book Libraries in Colleges of Education, Library Association, 1972, by Bateman, is concerned with the selection of books and periodicals. It is concerned with the aims of selection in relation to college needs as expressed in the first chapter of the book. It deals with the various forms of publication, e.g. paperbacks, programmed texts, microforms and pamphlets in relation to wise choice, considering both their original purchase and methods of protecting them. In relation to the provision of multiple copies, the difficult question of what should be expected to be provided from students' bookgrants is discussed, also the value of reference copies and short term collections. A college general policy is needed on how far to meet the estimated needs of B.Ed. students in 3rd or 4th year, together with a decision best made by an experienced librarian who can investigate the importance of a title, and weigh up the demand in relation to alternative titles. Likewise a college policy is needed on what can safely be left to be provided by other neighbouring libraries. Bateman favours the close cooperation of librarian and the whole of the teaching staff working as a team to select the right books, preferring an agreed allocation of money to different needs, with the librarian retaining a generous proportion for stock-building as well as for general works, and as an emergency reserve. To make individual liaison work more successful, it is important to send out as much information as possible on new materials, keep staff informed of newly acquired items, as well as liaise closely over reading lists, books received on approval and publishers' exhibitions. Librarians and staff should have regular discussions about weaknesses in appropriate areas of the stock. Methods of selection, ordering and allocation of funds, problems in setting up a new library, and methods of stock revision and maintenance are also discussed.

The following articles also raise important issues connected with book selection in academic libraries.

Danton, J. Periam. University Library Books Selection Policy Revisited, International Library Review 3. 1971.

Discusses pros and cons of librarian or faculty selection, and supports the idea of more selection by library staff who work closely on a specialist subject basis with faculty members.

Evans, C. Edward. Book Selection and Book Collection Usage in Academic Libraries, Library Quarterly 40.3. July 1970

Comparies use of books in American University Libraries when selected by different methods - Librarian, faculty or blanket order approval plan. Conclusion is that Librarians selected more titles that were used in their first year than faculty members or book jobbers, and that faculty members selected more used titles than book jobbers. Reinforces the view that librarians should share in responsibility of book selection.

Goyal S.K. A systematic method for reducing over-ordering copies of books. Library Resources and Technical Services 16 (1) 1972.

Finds that suspicion, doubt and lack of information lie behind over-ordering of copies. Believes that once agreed funds are allocated to departments proposers of items for purchase must complete full information about them, and categorise them as very essential, desirable, or to be purchased only if funds available. All books if not read by proposer should be obtained on approval. Titles for purchase are finally recommended after departmental meetings. Rules are devised for deciding how many copies to buy, but not more than two should be bought till demand is proved. Very close liaison and much detailed consideration is needed to ensure success.

Schad G. and Adams Ruth L. Book Selection in Libraries, A new approach, College and Research Libraries 30 (5) 1969.

Is concerned with the use of expert bibliographers in building library stock.

4. The problem

In the college of education library where the primary aim is selection of the best currently available materials to aid the study and teaching of the college, there is no place for a blanket coverage system (as discussed in some of the above papers), and there is merit in selection some time after publication when reviews have appeared and relative assessments made, except for urgently wanted items. Most libraries select some obvious items immediately, but cannot select the rest immmediately from all inclusive, non-annotated tools such as BNB. There is much to be said for seeing the book first in a bookshop, or in the library in the form of an approval copy.

From our investigations and reading on the subject, and from discussions with other librarians, the following seem to be the chief controversial or problem areas.

1. The extent of participation and degree of control of librarians and lecturers; the best methods of cooperation, and feeding of special knowledge and information into the system.

2. The possibility and extent of subject specialisation in this work of liaison by library staff (e.g. by faculty). There is a trend in university libraries towards subject specialisation among library staff who are responsible

for bibliography, advice, selection, liaison with teaching staff in well-defined subject areas. (See Humphreys, K.W. The Subject Specialist in National and University Libraries. Libri 17. 1967).

3. The means of establishing how successful book selection has been in meeting needs - the investigation of gaps in the stock, unused materials, too little or too much duplication.

4. The shortage of time to use to the full all the possible ways of improving book selection, and the lack of knowledge of the most suitable bibliographical aids to check content, value and coverage of all that is available.

5. The degree to which students can be successfully involved in the making of library policy.

5. The investigation in eight college libraries.

The investigation concentrated on the facts of present procedures and the directions in which librarians would like to go to improve them. A questionnaire, with an accompanying letter, was sent to librarians of colleges in 1971. This contained twenty-two questions on book selection procedures, together with an opportunity to offer additional comment. A copy is provided in Appendix III B. At a conference of the librarians in September 1972, four further questions were asked, and the response to these is also included.

6. Liaison with library agents in subject departments

Some college libraries work with library agents who are primarily responsible for coordination of book selection and two way communication with library staff, others do not. College B is not divided into subject departments, but in some areas, e.g. Rural Studies or English, lecturers have come together and nominate one member as library agent. Publicity and information is sent to those most likely to respond.

Some colleges divide their grant between departments, others do not. In some colleges librarians exercise their right to veto proposed purchase after discussion with departments, in some they do not. College E feels very strongly that librarians should have the confidence of their professional expertise, anticipate needs, and seek other specialist knowledge as required. Other colleges prefer to initiate some requests, initiate and confirm with colleagues some requests, and accept some colleague's requests. All agree that selection must be a cooperative effort.

Many librarians would like to do more stock maintenance and retrospective selection. The librarian of college G writes:-

> "What works well in English (and similarly in geography) is our checks that book selection has been carried out satisfactorily. From time to time (usually annually), we set aside one or two days in the vacation when the Head of the field and a senior colleague meet myself and a member of my staff to go through the English books. We look at them critically and either side may comment or ask: 'Why have we so few books on Pope?' 'The last essay set on Ibsen was unfortunate as we have far too few books to meet demand'. 'We must strengthen on D.H. Lawrence.'

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> We arm ourselves with likely bibliographic sources, e.g. C.B.E.L., The Reader's adviser, B.N.B. cumulations, Books in print etc.
>
> We regard this exercise as important as we can step back from the pressures of exhibitions, reviews, PICS cards and take a more overall view.
>
> As librarian I would like to do this with all fields of study, as the fact that we find this useful in a subject which is both library orientated and has sympathetic colleagues, would appear to indicate that it would be even more useful in other areas.
>
> My lack of time makes me reluctant to persuade colleagues in other fields to do this, so that it is only done at present in English and Geography."

7. Subject specialisation within the library

At the 1972 CISE Conference of College of Education librarians there was considerable support for the idea of subject areas of responsibility, including book selection, for each member of the library academic and professional staff. This is only possible in the larger colleges which may have 3-5 such staff. College A's librarian hopes, if staffing is increased in connection with the move to a new library, to establish areas of separate responsibility for Humanities; History and local history; Education and physical education; Social sciences and creative arts; Science and mathematics; and Children's books and textbooks. It is necessary for not merely the librarian, but also other senior library staff to acquire a close understanding of the syllabuses, options, courses, methods of study and examination, types of assignments set and curriculum experiments. This requires opportunities and time for them to meet teaching staff informally to discuss the logistics of meeting the demands which arise. Subject specialisation becomes even more helpful as the range of learning resources widens to include audiovisual materials, many of which are poorly provided for bibliographically. At the same time teaching staff can be helped to see the means of access, the range, the new additions to the sections of the library of special interest to them, and discuss the problems of providing adequate materials always available for browsing and study within the library as well as appropriate periods of loan for other materials. It might be wise to arrange in a system of subject specialisation for regular meetings of librarians with departmental lecturers and students to discuss these problems. Our survey shows much effort to use all the available tools, to consult and cooperate with lecturers who have specialised knowledge as well as to help and urge on those who are bibliographically weak. Shortage of time certainly inhibits more thorough book selection and checking of stock coverage. More definite arrangements are needed to obtain the views of students concerning deficiencies.

8. Selection by library staff

All librarians selected materials in certain fields without much consultation, e.g. reference books, bibliographies, local studies, children's books and books for school practice, and general works. One college assumed a very much greater initial responsibility (with help from academic staff where needed), amounting to 65% in some subject areas, and to 98% in others for all books bought, the average of the other college librarians' responsibilities being 19%.

9. Bibliographic searching

Some librarians stressed the shortage of time available for thorough combing of reviews, book lists, bibliographies, other sources of information and systematic methods of notifying staff. In this survey one college reported that they managed over 15 hours per week, but most were found to give only 2-5 hours per week to this very important professional activity. The evidence in our time studies for the amount of library time spent per book in selection was not sufficiently conclusive (see Part IV Table 2), but it certainly is smaller than the librarians felt it should be. They would like much more time to bring items to the knowledge of appropriate staff by scanning lists, obtaining items on approval, directing attention to reviews, and checking bibliographics and accession lists. College A in its proposed improvement in staffing, in order to improve book selection, allowed for an additional 4 minutes to be added to the unit time for acquisition, bringing it close to the amount of time spent in selection by other academic libraries. LMRU found the average for seven London academic libraries was 7.7. minutes per book.

There is evidently very close cooperation with publishers in taking advantage of their information services and offers to put on exhibitions. In many colleges other library accession lists and society lists are checked and help then obtained from outside expertise. Several librarians expressed great regret that they could not deal with reviews of books and other materials in specialised journals more thoroughly. College A, for instance, because of shortage of staff time has had to cease to scan the major scholarly journals it receives until staffing improves. This means that library staff originate fewer order cards for departmental approval, and gaps in stock are more likely to arise. Many libraries take advantage of an arrangement by which the chief educational publishers will send on approval copies of all their non-net publications (i.e. school textbooks), with the understanding that one copy may be purchased at half price. Many librarians obtain other individual items on approval where this is the best way of ensuring that a wise decision can be made over purchase. The difficulty, especially with a large staff and in a situation where staff are frequently away in vacations or during school practice, is to give colleagues the chance to judge the worth of such items within the approval period, and to avoid overlap with existing orders. Despite these difficulties it is felt that approval orders are necessary and should be made more systematically, since often titles not otherwise reviewed or seen in bookshops can be considered, and some saving in money (though probably outweighed by costs of staff time and return postage), can be made.

10. General considerations

Duplication policy of course varies with the size of the college. Most librarians do not go beyond 6 copies of a title. In the medium sized college duplication is mostly in the field of education, or in connection with B.Ed. studies and amounts to 2, 3, 4 or 6 copies. Relationship of selection and duplication to students' book grants is discussed elsewhere.

There seems to have been little successful cooperative book selection or stock policy in any area surveyed. Most libraries are still growing towards an optimum stock of currently valuable materials which must be on the college site.

A very important area for much closer cooperation is in the editing of students' book lists and in making sure sufficiently in advance that titles are in the library stock, or, if out of print, can be obtained elsewhere. This

TABLE 1 SELECTION TOOLS AND METHODS USED IN 8 COLLEGES

QUESTIONS 1 - 4. Use of B.N.B. in selection.

	A	B	C	D	E	F	G	H
Weekly B.N.B. scanned by library staff	Yes	No		Yes		Yes		
circulated in library agents/academic staff	No	No	Yes	No	not regarded as an appropriate selection tool - could lead to irresponsible selection, prefer better means of informing staff	No	No	No
Extracts sent to academic staff	Yes	No	by photocopies Yes	No		Yes	No	No
Quarterly/Annual B.N.B. Academic staff encouraged to scan for filling of gaps	Yes	No	Yes	No		No	No	Yes
Any other use of larger cumulations	for retro-spective checking	No	for stock revision	No		No	for stock revision in 2 subjects	Yes

QUESTIONS 5 & 6 American and other foreign material (obviously importance depends on courses offered)

	A	B	C	D	E	F	G	H
Circulation of Choice	Yes	No	No	No	No	No	No	No
Take C.B.I. & other foreign bibliographic	Yes	Yes	Yes		No	No	Library provides occasional book exhibitions otherwise relies on academic staff	No
tools	Yes	Yes		No	No	No		No
Circulate specialised lists, e.g. Collets, Blackwells, American publishers.	Yes	Yes		Yes	Yes	Yes		Yes
Use reviews in scholarly journals	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Other library accession lists.	Yes	No French staff select books in French.		No	Yes	No	Yes	

QUESTIONS 7 & 8 & 11. Use of reviews in journals

	A	B	C	D	E	F	G	H
Selective sending of items for consideration to academic staff from reviews read by library staff, and items noted in lists, e.g. H.M.S.O. lists.	(extensive coverage, now reduced because of shortage of time)	patchy	No	Yes	library staff scan all reviews and seek advice of academic staff where needed	sometimes	patchy	sometimes
Circulation of contents pages to academic staff	No	No	Yes	Yes	circulate monthly bulletin including reviews.	No	Yes	No

QUESTION 9 & 10. PICS. cards and publishers lists.

	A	B	C	D	E	F	G	H
PICS cards taken	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
circulated	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Publishers lists taken	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
circulated	Yes	Yes	Yes	Yes	No (publishers send direct)	No	Yes	Yes
filed permanently	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bookshop lists taken	Yes	Yes		Yes		Yes	Yes	

QUESTION 12. Other library accession lists.

	A	B	C	D	E	F	G	H
Receive other library accession lists	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Pass to depts. for checking stock	Yes	Library staff scan in education only.	no; file	No	librarian scans	No	sent to relevant person	displayed on notice board.

QUESTION 13 Publisher's displays in college

	A	B	C	D	E	F	G	H
In library	Yes	has college bookshop	Yes	No	Yes	No	Yes	Yes
Elsewhere	No	Yes	in SCR	SCR	limited:	No	Main Hall	Yes
No. per annum 1970/71	8	6	2	6	prefer own displays with outside help	None	5	local bookshop brings displays
Publishers reps. meet Acad. staff	Yes	Yes	Yes	Yes		Yes		

QUESTION 14 Society and other specialist lists

	A	B	C	D	E	F	G	H
Solicited	Yes	occasionally	Yes	No	Yes	Yes	Yes	No
Check by library staff	Yes (if very important)	Yes	Yes	No	Yes	Yes	No	No
Passed to academic staff	Yes	Much material is o.p. and has to be borrowed when needed		No		Yes	Yes	No

QUESTION 15 Estimated time spent talking on selection matters with academic staff per week in hours

	A	B	C	D	E	F	G	H
	1.9	5	1.9		cannot estimate c 12-15		1 -2	2- 3

QUESTION 16 & 17 Selection of audiovisual items

	A	B	C	D	E	F	G	H
Use publishers' lists	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Periodical reviews	Yes	No	Yes	Yes	Yes	Yes	Yes	No
Personal expertise		Yes		Yes		Yes		
Decisions on priorities in spending by special Sub-Committee deciding needs	Yes	lists staff interests	Small expenditure only so far	*		librarian in consultation with staff		

*Must assess needs of community in respect of provision at students' own level, teaching practice, staff for work in lectures

	A	B	C	D	E	F	G	H
By allocation to subject		Education given preference at present				No	Yes	

QUESTIONS 18 & 19 Library staffs' responsibilities in book selection.

	A	B	C	D	E	F	G	H
Library staff responsible for these areas	**Ref. bib, children's** books, local studies, gen background	Education reference Gen. works Local studies T.P. material New edns. of standard works	Ref. & bib. children's books B. Ed. special	Ref. & Gen. children's and T/P mats. and part of Prof. Studies. Area Studies	Total stock & total library service	Ref. & bibliogs. Filling gaps	Gen. ref. Background. Shares responsibility for T.P. books	Light fiction, current affairs, travel, filling gaps
Other responsibilities	Make out order cards for items found in lists & send to acad. staff for approval		Periodicals			Make out order cards and send to acad. staff for approval	Anticipates demand & buys c.6% stock	
% of total responsibility	20%		25%-30%	15%	main lib. c.65% A.V. 97% children's books 98%		19%	10%

QUESTION 20 Checks on success of book selection

	A	B	C	D	E	F	G	H
Frequency of use check from date labels and other records	Yes	No	Yes			Yes		
Annually in summer		No				Yes		
Check ref.books & transfer some to lending annually	Yes	No				Yes		
Examination of requests & reservations	Yes	No	Yes			Yes		
Occasional reviews of sections		No			Yes	Yes		general impression of use
Discussion of stock with academic staff at the shelves	Yes	No			Yes	Yes	in 2 subjects only - would like to extend	
Thorough examination of stock in relation to expressed demand as seen by library staff, future direction of courses, standard bibliographies and books lost or missing.		By talking to staff and students on extent to which library meets their needs				None of the above systematically - as part of stock revision		

QUESTION 21 Duplication policy

	A	B	C	D	E	F	G	H
Proportions per student	1 per 12-15 doing same course	2 or 3 copies of B.Ed. set reading lists		2 copies at least in education			usually 1 copy	
Maximum level	normally 5 or 6 copies	6, normally buy 1 copy, then add up to 2, more if demand is shown		4 copies of popular items, 6 of set reading (B.Ed.)		6, sometimes more in school services	2 except in education where 6 might be bought	
Methods of deciding	Reservations if more than 2 at once	Little outside education			Consider individual titles	1 Staff recommendation 2 Reservations		

QUESTION 22 Any formal or informal cooperative arrangement with other libraries

	A	B	C	D	E	F	G	H
Existing	Yes	No	No	No	No	No	No	No
Description	very small amount of cooperation through Library Board of Studies and with local large branch library				attempt in B.Ed. areas proved very unsuccessful			

SUPPLEMENTARY QUESTIONS

	A	B	C*	D	E*	F	G	H*
A. Use of titles on approval	Library staff check non-net books sent on approval from Chief Educ. Publishers and retain c.75%. Inspection copies of other items obtained when otherwise judgment is difficult, especially for expensive books.	75% of non-net books from Educ.publishers retained. Takes too long to circulate and recover from Acad. staff approval copies, so only specific titles obtained for 1 month on demand from tutors.		very little		When requested by Acad.staff some books borrowed from other libs. for inspection.	Some	
B. Checking that items on students' reading lists are in stock.	Lack of time prevents systematic checking	No departmental reading lists. Tutors check with library stock and college bookshop.		most unsatisfactory.		not checked in advance	Partially covered. Need for more careful liaison.	

* no information available.

SUPPLEMENTARY QUESTIONS

	A	B	C*	D	E*	F	G	H*
C.Visits to bookshops	5 or 6 per annum.Would prefer more visits and more time to check list of O.P.items wanted.	Annual visits to large lib. suppliers to buy T.P.books and to book sale. Occasional visits to second hand shops for local material		2 or 3 per annum.		Librarian rarely; teaching staff often. Occasional visits to other libs. very useful.	Important for librarian and staff to visit bookshops and exhibitions.	
D.Second-hand material scanning of lists.	c.12 firms send periodic lists. Most purchases are in education or local material.	Normally only look at local and educational sections. Are checking list of O.P. titles against Guild-Hall bookshop lists - no time to check against other lists.		for Area studies.			Scan perhaps 12 or so lists for older materials, which being a new college we do not have.	
BNBC Book lists	Yes			No (too time consuming)			Yes	
Periodical lists	Yes			Yes			No	

* no information available.

PART IV STAFFING REQUIREMENTS OF GENERAL COLLEGES OF EDUCATION

Introduction

Before any of the developments mentioned in the preceding parts can be implemented it is necessary to know exactly what work is being done at present, how long it takes and how long it would take if it were developed and completed. It should then be possible to assess the staffing needed to carry out satisfactorily all the services to which we have referred. This part of the report is concerned with Condition 2, i.e. the provision of sufficient and suitable staff (see Part I, Section 18). It also provides information in connection with the third Objective on the educational and information role of the library and the second Objective, as described in Part I, Section 2, i.e. publicity for resources and promotion of library exploitation, and in Sections 12.1 and 12.5 - 12.9 concerning ease of access to materials, and in Section 13.1, i.e. provision of an interloan service.

1. Present standards

Levels of staffing in maintained colleges of education libraries are currently determined by local authorities by reference to the second Odgers report. In the case of the voluntary colleges, the DES applies the Schedule C of College Letter 6/69, which is updated annually by College Letters based on memoranda from the Pooling Committee on costs in colleges of education. College Letter 6/69 is based on the provisions of the second Odgers report although it is not so generous. The professional bodies concerned with college librarianship, the ATCDE, and the LA, have also, over the years, jointly laid down minimum standards, the latest of which were published in 1967 (See Table I). The ATCDE was represented on the Odgers committee and the LA gave evidence which was based largely on ATCDE/LA memorandum, so presumably this latter had some effect on the provisions of the Odgers report.

Some libraries are still staffed below the Odgers provisions. Notes on the analysis of the Seventh Annual Survey of College of Education Libraries, 1971 conducted jointly by the LA and DES show that of colleges of 300+ students, 7 (4%) fell short of its recommendations for professional staff, and 24 (15%) fell short of the figures recommended by College Letter 1/71 for non-professional staff. The same survey shows that of voluntary colleges of 300+ students, 18 (37%) were below the ATCDE/LA recommended standards for professional staff, and 10 (20%) were below the levels for non-professional staff. In maintained colleges, the figures were 50 (46%) and 26 (24%) respectively.

The Odgers report was published in April 1969 although it was dated March 1968. An article by the NUCM Sub-committee of the LA Council on college libraries in LAR 70(2) commented in detail on the origins and deficiences of the report. Even at the time of its publication there was much criticism of the low level of its recommendations and this has assumed a more urgent tone over the past four years as college libraries have endeavoured to keep pace with increased demands for more and improved services. The evidence from the ATCDE/LA joint memorandum to the Odgers committee posed a basic minimum establishment from which to build. The Odgers report standards were based on this but have been used by most LEAs as maximum standards to be attained. What appears to have been disregarded by the committee is the fact that the ATCDE/LA evidence advocated a level of staffing suitable for a basic service to students during the working day

TABLE 1 RECOMMENDED STANDARDS FOR STAFFING OF COLLEGE OF EDUCATION LIBRARIES

No. of students		300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700
College Letter 6/69	Acad.	1		1	1	1		1	1			1		1		1
	Prof.	1		1	1	1		1½	2			2½		2½		3
	Cler.	½		1	1½	2		2½	2½			3		3½		4
	Total	2½		3	3½	4		5	5½			6½		7		8
1/71 where it differs from 6/69	Acad.															
	Prof.							1-2								
	Cler.			1½	2½	2-3		3	2½-3½			3-4		3½-4½		
	Total			3½	4½	4-5		5-6	5½-6½			6½-7½		7-8		
Odgers (3/68)** 4/69	Acad.		1		1			1		1				1		
	Prof.		1		1			1-2		2-3*				2-3*		
	Cler.		1		1-2			2-3		2-3				3-4		
	Total		3		3-4			4-6		5-7				6-8		
ATCDE/ LA 1967	Acad.	1			1			1		1				2		
	Prof.	1			1			2		2				2		
	Cler.	1			2			2		3				4		
	Total	3			4			5		6				8		

1971-2 Staff in 8 Colleges		H	G	F	D	E	C	B	A
	Acad.	⅓	1	1		1	1	2	2
	Prof.	⅓	1	3	3	2	1	3	3
	Cler.	⅓	3	3	3½	3	-	3½	5
	Total	1⅓	5	7	6½	6	6	8½	10

* One of these posts may be on the Pelham scale

** Date signed

of 9.0 a.m.to 5.0 p.m. It did suggest that additional staff would be needed to satisfy the requirements of longer opening hours, services to academic staff, and the amount of advance or specialised work, e.g. degree courses, in-service training, and post-graduate courses which many colleges would be undertaking.

The ATCDE/LA document made a step forward in suggesting that levels of staffing should depend either on student numbers, or on the amount of the bookfund, whichever formula produces the greater number of staff. This has never been accepted by the LEAs or the DES and yet many librarians find themselves under heavy pressure and have evidence to show that their workload, as measured by the number of issues, reservations, ILL, frequency of visits, etc. has increased while the size of the student and staff population has remained constant. At the same time, usual library activities have become increasingly difficult to carry out, the growth rate of literature and the increased use of newer media make selection of the appropriate items an anxious and time consuming matter, the more so as funds are being continually devalued by the increases in the cost of materials. The level of work now undertaken even by Certificate students on an increasingly varied number of topics and the greater emphasis on private or self-directed study, mean that student users of library stock and services require more bibliographic guidance and make heavier use of all services as a consequence. Further problems concerned with e.g. protecting the stock, introducing more appropriate routines, arise from the growth in size of the user population since the early sixties. Those who have reached Odgers standards feel that these have become a millstone round their necks, and even the few colleges whose authorities have allowed a more generous provision than the standard envisaged, still feel over pressured. Librarians in the Scottish colleges of education have recently produced proposed staffing standards at much higher levels than those provided for in the second Odgers report.

None of the present standards, however, is based on any factual evidence of need. No one has, so far, suggested that libraries should be staffed on the basis of their real, clearly defined and closely measured needs, as these relate to the aims and objectives of the library and of the institution which it serves. If this were possible, and the general criticism of prevailing standards proved to be justified, their continuance would then be seen to have the effect of curtailing satisfactory library services and, consequently, one of the main supports of the work in higher education which colleges are meant to carry out. On the other hand, authorities who decide staffing establishments have the right to be sure that existing staff are being efficiently used before accepting the libraries' case for more staff. There is a need, therefore, to measure how efficiently existing staff are being used, to discover what constraints, if any, prevent their more effective depolyment and to discover also, how far comparisons between different college libraries can provide a guide to the means of increased productivity and the efficiency everywhere.
Our terms of reference, therefore, were to find effective ways of measuring the productivity of library staffs and to consider the efficiency and adequacy of present staffing arrangements.

A total detailed picture of several libraries was thought necessary to find out:

1) What were the main activities of each library and what time was being absorbed by each of them.

2) What priorities and constraints governed the way the time was being used and what differences there appeared to be between the colleges.

3) How long various major activities took, and how far tasks, workloads, and procedures varied from college to college.

4) How much additional/less staff time would be needed, and of what type, as any activity increases or declines.

5) What backlogs exist and what tasks are not attempted at all.

6) How college libraries compared with other academic libraries for which similar data exist.

By projecting the existing trends and by working off backlogs and by incorporating tasks not yet attempted, it should then be possible to consider how much of each library activity would be needed in the near future. Thus it would be possible to assess the type and amount of staff which would be required to complete these tasks efficiently and adequately, and enable the library to fulfil its objectives.

In all four libraries which undertook an investigation into staffing, there were areas of work which were not being completed, thus giving rise to backlogs. Other important tasks were not being tackled at all and yet all four were staffed in accordance with the Odgers recommendations (See Table 1). One librarian states,

> "It is quite clear that the Odgers report on library staffing is now of historical interest and bears no relationship to our current staffing needs."

2. Time Studies

Over and above the obvious differences arising from e.g. being in an LEA or voluntary college, college libraries sometimes widely differ in the priorities of their librarians, the range of services offered, opening hours, type of building and working conditions, and ways of doing what are basically the same jobs. It was not possible with the limited research staff available to measure the operation of more than four libraries, but the comparative analysis of these has provided a basis for establishing, with reasonable certainty, a general picture of how long certain operations take, and what proportions of time are spent on certain jobs. Where startling differences occurred it was normally possible to find reasons which either confirmed or falsified the result.

It would have been possible to study different parts of various libraries at different time, thus lightening the workload of research involved, and to use the data thus obtained to build theoretical models of the operations of a notional library. We felt that complete studies of whole libraries over an extended period of time would give a more practical and accurate picture, and would have the advantage of showing what theoretical models could well miss.

Twelve weeks was the longest period we felt that the staffs concerned could be asked to undertake recording. At the same time, it is probably the shortest period within which a satisfactory picture could be obtained of the varying rates of pressure of business in this type of library where term, vacation, teaching practice, and other periodic activities cause such an ebb and flow of demand.

The staffs of the four colleges, already under considerable pressure, willingly gave us their full co-operation in recording work times and unit outputs, and in completing the initial data gathering exercise. Because of the scale of this investigation, it was necessary to use methods of measuring which were largely self-recording. After discussion with LMRU we finally chose a method which was based on their form of recording for the purpose of collecting data for a management information system, but modified it by the introduction of coding for the main activities and their sub-divisions and additional recording forms for service points. Self-recording, as a method, is perhaps more suited to use in larger academic libraries where staff spend larger proportions of their time on one particular activity. In college libraries where staff have to spread themselves over a wide range of activities and so are constantly changing occupations, such a method proved a heavy burden, and we think that it might be possible to evolve simpler methods having the same advantages of covering all library activities over a given period and able to produce the same valid results. We are very grateful to the four librarians and their staffs who spent much time and effort on this investigation, and without whose help it would not have been possible.

3. Timing

Three of the studies lasted 12 full weeks, the fourth lasted 13 weeks. College A's study began on 13th September and ended on 3rd December, and included the last two weeks of the summer vacation. The other three ran from approximately the end of October over the Christmas vacation to the middle or end of January. Where these different times and the events occurring within them have affected the results in any way, they will be discussed later in connection with the activities concerned.

4. Method

All library activities carried out by all members of library staff were listed and grouped into 13 main activities with a definition of the resulting unit of work output where applicable. The main activities were:

- Acquisition
  - Books
  - Periodicals
  - Audiovisual materials
- Stock maintenance and Conservation
- Reader Services
  - Circulation
  - Internal Use
  - Interloan
  - Reprography
  - Readers' advice
  - Reservations
- Administration (including CELRP Research)
- Teaching, guidance and display
- Registration

A fuller list is given in Appendix IV. Table 1. The list was circulated to the four librarians concerned and, with some further inclusions, was agreed. Three of the libraries were visited by research staff who explained the purpose of the investigation, the job list, and the recording forms to be used to all the staff. Examples of these and of the personal indexes prepared for each member of staff at College A are given in App. IV. Table 1. On Form A each one recorded in minutes the time spent on the different parts of the main activity which was their normal responsibility, or which had been assigned to them for the purpose of recording. Form B was used to record time spent on other main activities (except Circulation and Readers' advice), and other miscellaneous times such as tea and coffee breaks, leave, sickness and temporary absence from college. Time spent on manning service points, such as the issue counter and readers' enquiry desk was calculated from the staff's weekly timetable, work not proper to the service point being recorded on Form C kept at each point and later deducted from the total time spent on the activity of the service point. Slight modifications were introduced to suit the circumstances of a particular college, but basically, all followed the same method. At College E the librarian had done a similar investigation on a limited scale some time previously, and preferred to use specially prepared exercise books with which her staff were already familiar, and she herself coded all their activities.

At College A, a trial run took place in May 1971, and from this and from discussions at the conference on library management techniques at Cambridge, and with the four librarians, certain improvements were made. The other three colleges also undertook trial runs of several days to test the methods of recording and to familiarise staff with the procedures. In the light of this brief experience the job lists were revised and where staff had had difficulty in finding appropriate codes, they were advised to note brief descriptions of work instead.

The wide range of jobs involved in Circulation, some of which affect only a small proportion of the items issued, necessitated the use of activity sampling to discover what proportion of Circulation time was spent actually issuing and receiving books at the counter at College A. We also timed these last two activities with a stop watch to see how far their times varied. During the analysis of the four time studies we visited the librarians to obtain further background information, and to find out where differences in job analysis and description had meant that different activities had been included under the same heading in different colleges. Further interviews took place at the later stage of applying the results.

5. Where the time went.

Regular Time

Full definitions of the terms used in this section and a detailed breakdown of where the time went are given in Tables 4.1 - 4.5 of Appendix IV. There appears to be no standard week in terms of working hours among colleges. The difference in the two colleges with the shortest and the longest working week could theoretically amount to 156 hours per person over one year, and both of these are voluntary colleges. The total official working hours per week of each library during term time are:-

	A	D	E	G
Hours per week	377.5	230.5	222	190

Colleges A, D and G use some of their clerical staff in part time equivalents, D being forced to spread $2\frac{1}{2}$ of its $3\frac{1}{2}$ clerical posts over 6 people in order to maintain counter supervision during its long opening hours. College D's authorities prefer to use its staffing resources in this way in order to stretch the funds available for staff to cover the supervision of long opening hours, but it has the effect of preventing the appointment of a tutor librarian.

If annual leave is included in the total of paid working hours for each library's full complement of staff for the duration of the Time Studies, the totals for the four colleges were:-

	A	D	E	G
Regular time (1)	4734	2660	2880	2280

College A's total includes time worked by an extra professional appointed for the duration of the research project to make up for the time lost to the library by staff working on the research project. All time recorded on research work for the project has been separated in the analysis later. College E's total isslightly inflated in comparison because its Time Study ran for one week longer than the others. From these totals a certain amount of time was lost before any work was attempted.

Lost Time

	A %	D %	E %	G %
Staff leaving	4.3	1.2	3.7	-
Annual leave	2.3	11.6	8.5	9.4
Sickness	5.3	2.0	.7	2.1
Out of college	.1	1.1	.1	.1
Total %	12.0	15.9	13.0	11.6
Hours	570	423	375	264

Time lost through staff leaving was in each case caused by one clerical leaving. Colleges, D, E and G lost more time than College A on annual leave, because their Time Studies included the whole of the Christmas vacation period. College D's is highest because the library, like the college, closes for a week. College A suffered a comparatively high sickness rate, the greatest part of it being shared equally between academics and clericals. In all, five members of staff were away for three days or more at some time during the Time Study and one of them for ten weeks. A temporary appointment was made for part of this period. College E achieved its extremely low sickness rate at the cost of staff coming to work at times when they ought to have stayed at home.

The time then remaining as a percentage of regular time was:-

	A	D	E	G
	%	%	%	%
Gross time	88.0	84.1	87.0	88.4

A further amount of time was lost to actual work by the relaxation allowance which is intended to provide opportunity to recover from the physiological and psychological effects of carrying out specified work under given conditions and allows attention to personal needs. It includes tea and coffee breaks The generally accepted rate for library work is 12.5%.* The following rates were calculated from the time recorded by the staff of the four colleges.

	A	D	E	G
	%	%	%	%
Relaxation allowance	13	12.6	7.0	7.5

The variations between the colleges could be partly due to inaccuracies in recording. At College E the low rate is partly due to the fact that the academic and professional staff were taking working tea and coffee breaks because of the pressure they were working under at the time. Because of their method of recording some of College G's relaxation has been lost in time recorded as worked (See Section 53). The rates need not be significant because what matters eventually is the work output rate per person, and this will be dealt with later.

The proportion of regular time that was actually worked i.e net time, therefore was:-

	A	D	E	G
	%	%	%	%
Net time	76.5	73.4	80.9	81.8

Each library, however, regained some lost time either through work contributed by two library school students on field work, as at College A; by extra temporary staff as at College G; or by normal staff working unpaid overtime, (all colleges). The range varied from 2.4% at College G to 9.4% at College E, where academic staff put back 33.5% of academic regular time mainly by working overtime in the Christmas vacation, and professional staff put back 11.7% of theirs in general overtime.

The final total of time actually worked, i.e. total net time as a percentage of regular time, was:-

	A	D	E	G
	%	%	%	%
Total Net Time	85.2	79.1	90.3	84.2

* see Appendix IV . Table II

6. All Staff - together.

As we have seen, the total time recorded during the Time Study in all four colleges was very close to the total time available for work in each. It is, therefore, reasonable to assume that the proportions of that time recorded as spent on each job are fairly accurate guides to the proportions of the total time actually spent on each by the library in question. Some inaccuracy will probably have crept in as a result of using a self recording system, as sometimes staff failed to note down time on a job immediately and, therefore, had to rely on their memory when completing their forms. There seems, however, no reason to suppose that this has happened for any one job more than another and, therefore, most such inaccuracies will cancel each other out (but see Section 53). Obviously, however, the actual percentages of overall time which can be found in Table 5 of Appendix IV, may be out by a small amount in each case, and those which are very close to each other may, in fact, be the same; or one which appears very slightly larger could be very slightly smaller.

There was agreement in all four colleges as to which activity took up the highest proportion of the time. It was 'E' Circulation. This varied from 43% at College D to 23% at College E. These variations are to be expected when we know that College E is the only one which has an unsupervised issue system, and College D has very long opening hours requiring the employment of part-time staff just for evening, Saturday and Sunday work at the counter. These people do very little else as they are employed as little more than supervisors. The proportions at Colleges A and G are very close to that at College D as they also have supervised issue systems. The librarians at all three of these colleges consider these systems necessary in order to control book losses. College D has experimented with an unsupervised issue system but abandoned it owing to the resultant heavy losses. At College E, however, a complete stock check showed that the loss rate was 1.6% which is below that found at most other colleges, (see Library and Information Bulletin No. 15. Library Association 1971). At College G a staff controlled exit gate has also been introduced to further control book loss: this increases staff issue supervision time. At College A a Diver detection device is being installed for the same reason; whether it will increase circulation time or not cannot yet be judged.

Another reason for the smaller percentage at College E concerns the large amount of overtime worked there. If the total time worked minus overtime is calculated then time spent on Circulation would be 27% of this. This is a reasonable figure to use because all the overtime was worked on activities other than Circulation, time for which is obviously only ever a proportion of that part of the working day when the library is open. At College A the larger staff size probably enables a smaller proportion of the overall time to be used on Circulation since if the counter is supervised this must be occupying at least one person and that is a smaller proportion of the total staff at work in a larger unit. Obviously the full amount of Circulation has to be done in all the libraries whatever other tasks have, as a result, to be abandoned. Difference in the time of year of the Time Study may have also made a difference to this proportion. Slightly less holiday period, when very little circulation takes place, occurred at College A, but slightly more occurred at College D. Variations in School Practice pressure at different times of the year will also affect the amount of work going on in this area. (See Part II, Sections 11 and 12 on the peaking of library use). For a discussion of the actual amount of work completed, i.e., the number of issues per member of library staff and the unit times for issuing materials, see Sections 53 and 55.

The Acquisition of books was the second most time consuming activity in all colleges save College E. There, it was the third largest proportion coming after Administration. However, all these colleges were involved in time consuming research for this project, and much of this time was probably won at the expense of certain types of administrative activity, especially as, in most cases, it was work done by the librarian himself, whose main task otherwise was usually Administration. For a further discussion of this see following section on how each type of staff spent their time. If this is really the case the Administration is the second most time consuming activity in a library and absorbs between 15% and 20% of the total time, the proportion being slightly larger in small libraries, where less time is available but where many of the tasks involved in running, organising and policy planning for the library will remain as time consuming.

	A %	D %	E %	G %
Acquisition	15	16	11	27
Administration	11	13	16	15
Research	5	5	4	7

If this assumption is correct, then Activity A Book Acquisitions is, under more normal circumstances, the third most important activity in all four libraries. None the less, the situation at College A was slightly different and probably some of the research time would have normally gone on cataloguing and classifying (Book Acquisition). Since Colleges A and E, and to a lesser extent College G, have backlogs in this area, it may be that, to avoid backlogs book acquisition should be the second most time consuming activity (See Sections 63 and 67) College D has been spending a very large non-recurrent grant, and in order to get all the books on the shelf fairly quickly has cut corners in Processing and Cataloguing as far as possible(for further evidence of this see the discussion of unit times in Section 35-41).It is particularly surprising that College A's proportion should be second smallest as the amount of Processing required by its issue system is greater than elsewhere. It is again likely that the larger library will be able to spend a smaller proportion of its time on this activity than one with fewer staff (but see details concerning workloads in Section 44). The two libraries with the lowest time on this activity, one of which was College A, both have quite large backlogs and presumably if they were to have time to complete these tasks their proportion of time on it would need to increase.

The next most important activity for absorbing time spent in most of the colleges is user guidance in the form of Teaching, Guidance, Displays and Readers' Advice.

	A %	D %	E %	G %
Readers' Advice	4	2	14*	1
Teaching display and publications	5	7	10	4

* includes preparations of weekly periodical subject index.

In fact, if one includes bibliographies, display etc. under this heading, at College E work of this nature will take first place in the league table, absorbing 24% of the total time. About a quarter of this is spent on subject indexing of periodicals which the librarian would like to count as part of putting periodicals into stock and as equivalent to classifying and indexing books. About another quarter of it was accounted for by the production of bibliographies and the setting up of displays, thus leaving about 11% of total time spent on Readers' Advice and Teaching. None of the other libraries have such a detailed programme of activities in these fields but at College A, and to a lesser extent at College G, the Time Study did under represent some of the time these activities would occupy because the major work on student guides had been completed prior to the start of the Time Studies. However, because of the coincidence of induction courses and Time Study it has over represented the time spent on teaching at these colleges. All the librarians believe that there is a backlog in advice, guidance and bibliographic work and that for full exploitation of stock and to fulfill the changing demands of students, a greater proportion of time should be given to all aspects of work included here.

Time spent straightening shelves and shelving books used internally is the next biggest job in most libraries, although processing of audiovisual items occupies more time at College E. The range of times is particularly wide here from 9.5% at College A to 1.9% at College G.

	A	D	E	G
	%	%	%	%
Internal use	9	8	5	2
Audiovisual acquisition	4	2	10	1

This partly reflects different amounts of internal use, but is also caused by a backlog in straightening, which, in fact applies in varying degrees to all colleges. The geographical layout of the libraries has also played a part here. At both Colleges A and D there are several different working areas at different levels, resulting in large amounts of walking. Colleges E and G have very much more compact libraries, but in the former, library staff have to contend with very high old-fashioned book cases, and the children's library is in a separate room.

The proportion of time occupied by audiovisual acquisitions work reflects the extent to which this collection has become important in each library. It varies from 10% at College E where more individual audiovisual items than books were processed to 1.2% at College G which has a small audiovisual collection at present. At College A where there is a large collection, but rather fewer items than usual were being acquired at this particular time, the proportion is 3.6%. This hides a kind of backlog in selection, as a conscious decision to buy fewer items had been taken owing to lack of time for processing them. 1.6% of time only was spent at College D, partly because although this college has a unified resources centre, no proper annual grant for audiovisual materials has been obtained for the library, and partly because of the corner cutting used in processing (for reasons explained above in relation to book acquisition). Also a large number of the items processed during the Time Study were pictures for a partly expendable collection which require very little processing.

There remain five activities which each occupied only a small percentage of time. Three of these, Reservations, Interloans and Reprography can be considered together as reader services. At College E these occupied over 5% of the total, most of this going on Reservations. At College A they occupied 3%, again mainly on Reservations, and at College D where a coin-operated photocopying machine is installed and the reservation system was new and probably not yet at its peak of use, only 2.3% of the total time involved. At College G, where only 1.3% of total time went on these activities, there is a coin-operated photocopier and no formal reservation system.

Periodical Acquisition includes selecting, invoicing, cancelling etc. but most of the time goes in checking off receipts of periodicals and shelving them. This occupied 2.4% of the time at College A, but included time adjusting and altering the periodical catalogue. At Colleges D and E it occupied 2.2% and 1.8% of time respectively. At College G, in order to save time, periodicals are only shelved weekly and readers do not seem to mind. Elsewhere this is a daily task. Therefore only 0.5% of total time at College G is spent on this task.

A small amount of Stock Maintenance took place in all libraries. Most of this job is done in the summer vacation, when stocktaking and weeding, etc. generally take place. The proportion of time this job would take over a year has, therefore, been underestimated by the Time Studies.

	A %	D %	E %	G %
Stock maintenance	2	1	0.2	2

Only at College A did Registration of students fall within the Time Study, where it occupied 2.2% of time probably an overestimate for the whole year; elsewhere the times recorded are underestimated.

	A %	D %	E %	G %
Registration	2	0.1	0.2	-

This research occupied about 5% of time in all these colleges and this proportion would obviously usually be used on other activities.

7. How Staff Spent Their Time, According to Their Grade

We have noted that in spite of considerable agreement as to which jobs occupy most time in a library there is considerable variation as to just what proportion each occupies. All libraries have found it necessary to leave undone some things which they ought to have done, but different choices have been taken as to what to leave out; also some librarians have a larger proportion of their time earmarked for them by activities they cannot avoid doing, such as opening the library, issuing books, answering letters, etc. Some variations have also occurred in the Time Study, of course, which would not apply to a whole year. We will now consider what proportions of each type of staff time are spent on each activity.

8. Academic Time

At College D there is no academic librarian, but for the purpose of this part of the investigation the results pertaining to the chief librarian have been separated from the other professionals for comparison purposes (see Table 7 in Appendix IV) for actual percentages of time spent on each activity by each type of staff). The most time consuming activity for the academic staff is, inevitably, Administration; which with research work absorbed more than 50% of their time in each case. The second highest proportion of time varied from college to college. At College A it was Circulation, but the situation is rather different there because there are two academic staff. Acquisitions occupies nearly as much time there, and this is also the second most important activity at College G. At College E, where we have already noted the larger amount of bibliographic work and where there is also a more detailed teaching programme, Teaching, Guidance and Display occupies the next position, as it does at College D. It is the third most important in the two remaining colleges. 8.6% of College G's academic time is spent on Circulation, and it is the fourth most time consuming activity there, while the fourth position elsewhere is held by Readers Advisory work. All other activities occupy only very small amounts of academic time. The biggest variation, therefore, is in the proportion of time spent on Book Acquisition. The very small amount at College E is explained by the librarian's policy of leaving this work almost entirely to her professional assistant.

	A	D	E	G
	%	%	%	%
Book Acquisition	11	7	3	19
Circulation	12	2	1	9
R.A., Teaching Bibliographies and Display	16	28	42	15

9. Professional Time

There is more variation in the use made of professional time. At both Colleges D and G a third of this goes on Book Acquisition but at College A the most time consuming activity is Circulation. At College A it amounts to nearly half the total professional time and at College E about one quarter of the total time is circulation. Both these colleges have heavily used restricted loan systems and the geographical layout at College A prevents users from having access to library staff except those at the counter or at the Readers' Advice desk. Book Acquisition is most time consuming at the other two colleges. Readers' Advice and Administration are also very time consuming at College E.

	A	D	E	G
	%	%	%	%
Book Acquisition	14	38	15	38
Circulation	45	26	26	16
Readers' Advice	9	2	20	6
Administration	7	8	14	13

At College G much of the research analysis was done by the assistant librarian, and it absorbed 17% of her time, while elsewhere it was done by the academic staff. Administration ranked next highest at College G, followed by Readers' Advice work, which, with Administration, Teaching, Guidance and Display also ranked high at College A. The latter also figured at this level at College D and Internal Use was next most important everywhere save at College G where Interloans took its place.

	A	D	E	G
	%	%	%	%
Lectures, display, publications	6	6	2	-
Internal use	5	5	5	1
Interloans	2	0.1	2	4

It would seem, therefore, that the variations in the librarians' decision or need to leave certain tasks undone in order to do others shows up most in the differences in use made of professional staff, although some of these differences result from the fact that in some colleges, such as College A, the professionals help in teaching programmes while elsewhere they do not, and also from the differences in the division of labour between academic and professional staff on tasks such as Acquisitions. There are also differences between the librarians' decisions concerning which jobs are professional and which clerical and, where a small staff is concerned, between their opportunities to use staff consistently for work suited to their grade. These points we shall consider later.

10. Clerical Time

In all colleges, the most time consuming activity for clerical staff is, as is to be expected, Circulation.

	A	D	E	G
	%	%	%	%
Circulation	44	55	31	57

The proportion is lowest at College E because of the unsupervised issue system. At College A it is second lowest, because of the large proportion of this work done by professionals. Elsewhere it occupies well over half the clerical time. Acquisition of books at Colleges A and G, of Audiovisual materials at College E and Internal Use at College D rank next. Book Acquisition ranks second at Colleges E and D, however, and shelving and straightening, i.e. Internal Use is time consuming everywhere save at College G, where we have noted a straightening backlog coupled with a library which has fewer shelving problems due to building design than elsewhere.

	A	D	E	G
	%	%	%	%
Book Acquisition	16	8	13	26
Audiovisual acquisition	4	4	14	2
Internal use	14	11	6	3
Administration	4	6	6	6

Administration generally rates as next most important and most other activities are very minor users of clerical time, except for producing a subject index of periodicals, which occupies nearly one eighth of the total clerical time at College E. This activity is not carried out elsewhere.

11. Extra Staff

At Colleges A and G staff outside the normal complement were employed during the Time Study. At College A these were library school students on field work. At College G it was a part time professional employed on clerical grade to help relieve the pressure created by taking part in the Time Study. At College A the parttime member of staff employed to relieve the librarian for research work was a professional employed as a professional and, therefore, there is no problem in allocating her to a staff group and work done by her has been included with the other professional times. At both Colleges A and G these extra staff were used mainly for book acquisitions (31% and 52% of their time respectively). At College A they also did considerable work on shelving and straightening (Internal Use), i.e. 28% of their total, and at College G they did considerable circulation work (20%); audiovisual, bibliography, display and research work was also done by the students at College A, i.e. 10%, 8% and 13% of their time respectively. See Table 7 for detailed breakdown of the remainder of their time.

12. Conclusion.

Except for the periodical indexing and the large proportion of audiovisual work at College E, which is partly explained by their large number of audiovisual purchases, there is overall agreement about the major tasks for clerical staff, although considerable variation in just how much of their time is spent on them. It is noticeable in all that has been said so far that at College E all types of staff spread themselves more thinly over a wider range of major tasks. Given a situation where certain tasks have to be done, notably Circulation, there is more chance of this in a library where the issue system causes this sphere of work to absorb less time. The librarians, however, are still apparently left with the situation where they either attempt all tasks, allow backlogs in some physical areas and work considerable overtime as at College E; attempt most tasks and still have backlogs in all areas if something nearer a normal working week is kept to, as at College A; cut corners in order to eliminate backlogs in some areas, yet still leave some tasks unattempted as at College D; or eliminate backlogs in some fields by concentrating only on those areas and leave others virtually completely unexploited as at College G. All these circumstances are equally unsatisfactory.

SOME IMPORTANT AREAS OF LIBRARY WORK

13. Introduction

We have noted that some of the most time consuming activities in the library are the Circulation of items, Acquisitions and Administration. It is therefore useful to investigate these fields more closely as far as is possible. They are also areas which include a number of quite separate activities and which therefore lend themselves to division into their separate parts. The wide range of types of work which have been included under the heading 'L' Teaching, Guidance and Display require separate investigation since each part included is an important and increasing activity in itself. The work included under the heading 'Internal use' also needs dividing out because part of the task is subject to backlog, while other parts of it are not.

14. Book Acquisition

Tables 10 & 12 in Appendix IV show the proportion of total book and audiovisual acquisition time spent on each part of those tasks. It is most useful to consider academic/professional work as one type because in most cases the division is arbitrary; the exception is Selection which is a task largely undertaken by the tutor or chief librarian. At College E the professional librarians are involved in selection, but the tutor librarian also does some and this is the only part of acquisitions work in which she is concerned. The most time consuming part of acquisitions from the professional/academic point of view then becomes Classification and Cataloguing, except at College E where it is Ordering. Ordering, Accessioning and Filing cards are also fairly time consuming everywhere.

	A	D	E	G
	%	%	%	%
Classification and Cataloguing	39	43	16	52
Ordering	13	18	38	12

At College E, it must be remembered that very different numbers of items were completed in each section and that, therefore, although we can see here the proportion of time spent on this task during the Time Study, the picture is very different from the proportions which could prevail if there were an even flow of tasks through the system. Excluding proportions of Academic time (100% on Selection in both cases) the picture would then look approximately as follows-

	Time Study Proportions	Proportions needed for even flow	Time Study Proportions	Proportions needed for even flow
	Professional	Professional	Clerical	Clerical
	%	%	%	%
Selection	28	20.8	-	-
Ordering	37.7	25.6	35.9	15.9
Accessioning	6.3	4.8	5.4	3.0
Classification	15.9	28	-	-
Typing Catalogue Cards	2.[illegible]	4	50.3	70
Physical processing	6.3	13.6	1.9	2.6
Final checking	3.6	3.2	.9	.8
Filing	.1	-	-	-

This rider applies to a lesser extent at College A.

The most time consuming activity for clerical staff is generally Physical Processing, Accessioning and Ordering.

	A %	D %	E %	G %
Physical processing	63	9	50	36
Accessioning	12	19	5	16
Ordering	5	60	36	46

The exception is College D where for reasons referred to earlier, the processing is kept to an absolute minimum, and as will be explained later is done mainly by professional staff. At College A ordering includes less clerical work (see Section 21).

15. Audiovisual Acquisitions

Where audiovisual items are concerned the activity which occupies the highest proportion of professional time varies in each case. At College G, very little work with audiovisual material is done at all by such staff; it has, therefore, all been placed together in Miscellaneous. There is great variation between the situation at Colleges D and E where a large proportion of professional time on this task (44%) is spent processing and at College A where hardly any of their time (1%) goes on this activity. Otherwise Selection, Ordering, etc. and Indexing are the most time consuming activities for professional staff.

	A %	D %	E %	G %
Selection, Ordering and Accessioning	31	18	35	-
Cataloguing and Indexing	25	33	19	-

There is similar variation in the use of clerical staff on this task (see Table 9, Appendix IV). These situations are partly caused by the wide variety of materials included under this heading, some of which need much processing and the remainder of which need little or no preparation. Each of the four colleges' collections is at a different stage of growth and the balance of different types of item, therefore, varies considerably. (For a further discussion of this see Sections 47-9 on unit times). At College E the point made about the number of units completed in each part of the task Book Acquisition also applies to audiovisual items. The proportions to obtain an even flow (again, apart from Academic Time) in comparison with those achieved during the Time Study would be as follows:-

	Time Study Proportions	Proportions needed for even flow	Time Study Proportions	Proportions needed for even flow
	Professional %	Professional %	Clerical %	Clerical %
Selection, orders, etc.	34.8	50	28.2	43.2
Cataloguing, Indexing	19.2	17.1	36.6	28.8
Physical processing	43.8	30.5	35.2	30.0
Taping	-	-	-	-
Filing	2.1	2.4	-	-
Miscellaneous	.2	-	-	-

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16. Circulation

Because of the way items covered by Circulation were recorded and analysed, it is not possible to produce a similar breakdown for this activity, except at College E. However, some activity sampling* exercises were carried out at College A to ascertain what proportion of this time went on shelving books, writing overdues and administering restricted loan collections, in comparison with the proportion spent on actually issuing and returning items. This was compared with the relationship between the total unit time obtained from the Time Study and the time obtained for issuing and returning books and audiovisual items which was investigated by a timing experiment. The proportion of total circulation time spent issuing and returning books and audiovisual material was found to be between 14 and 24%, the first figure being the one found by timing (see Section 53) and the latter being the figure found from activity sampling. The proportion of time actually shelving was found to be 15%, according to activity sampling. The timing experiment (used for shelving internally used items, see Section 54) indicates that it would be about 22% of total time. If the amount of time shelving, servicing and making overdues is the same for audiovisual items as for books, and therefore the only difference in time for these two items is in issuing them, then about 7% of Circulation time was spent on all aspects of circulation of audiovisual items, about 1% of which may have gone on shelving (but not sorting) these items.

About 15% of total time is probably spent supervising the counter. The even greater amount of time spent at College D is probably explained by their longer supervised opening hours and at College G by the more complex supervision method used, although no timing operation or breakdown of circulation time is available for these two colleges to show just what proportions of their time on this task is absorbed by counter supervision. At College E a breakdown of this activity suggests that about 20% of total circulation time went on shelving books and about 5% on issuing and returning audiovisual materials from a closed access collection. A large proportion (about 28%) of the remaining time went on issuing books and periodicals from a reserve collection in the workroom. About 6% went on writing overdues, following up lost books, etc. and about 17% of total time went on issuing (excluding returning ordinary books).

17. Administration

The only library which recorded in such a way that breakdown of Administration was possible is College E which divided administration into the following three sections, (1) day to day administration (2) planning, time at committees, etc. and (3) professional study, conferences, etc., occupying the following proportions of time -

	Academic	Professional	Academic and Professional together	Clerical
	%	%	%	%
(1)	27	66	43	100
(2)	53	18	39	
(3)	20	15	18	

Fuller information on this for the other colleges will be included in Section 62.

* All staff involved in Circulation were sampled randomly throughout one week and the proportions of time spent on the various parts of the activity were then calculated from the number of readings obtained. The total number of readings taken was about 290.

18. Teaching, Guidance and Display

Table 14 in Appendix 1V shows the proportion of the total time spent on teaching and bibliographic work which went on 1) teaching, 2) displays and bibliographies, 3) library and staff courses, 4) personal tutorial advice. This latter heading did not apply to College D, as there is no tutor librarian as such. Only College A was involved with student librarians on field work during the Time Study, although this activity figures elsewhere in the year at both Colleges E and G. At College A both academic and professional time in this field went mainly on the teaching programme. At College E very little professional time went on the teaching programme; most of it went on book lists and display. At College G the professional time also was spent on activities in this latter area. At Colleges D and E all clerical time was absorbed by book lists and display, while at College A it was divided between lecture support work and booklists and display.

19. Internal Use

Another area for which a further breakdown of time is useful is Internal Use. This consists mainly of shelving internally used materials, and straightening the whole library, but includes a small element of general library supervision. We have already referred to the existence of a backlog in straightening in the sense that shelves are put in order too infrequently to allow readers to find books in reasonably good order when they are searching for an item. It is important, therefore, to know how much of the time was taken and how much work was done in order to discover the time needed to complete the task. Detailed analysis of the returns at the four colleges produced the following proportions of total time spent on Internal Use.

	A	D	E	G
Total Time	383	163	124	36
	%	%	%	%
Shelving	41	53	9	45
Straightening	58	43	91	53

At the four colleges timing experiments were carried out on a sample of 100 shelves to ascertain how much work was done in this time (see Section 54 on Unit times.) At Colleges A and E straightening is a task which is given priority and it is done on a regular basis, although at College A it is not completed as regularly as is considered necessary by the Librarian. At Colleges A and D shelving can involve returning books which have been used in different parts and on different floors of the library while at College A, in addition, users had been asked earlier in the year, in connection with the failure survey (see Part II Section 14) not to reshelve the books they had used.

JOB ALLOCATION AND STAFF GRADING

20. Introduction

Table 6 in Appendix IV shows the allocation of each activity to each type of staff. For most jobs it is reasonable to consider Academic/Professional allocations as being arbitrary and mainly decided according to the particular preferences and situation of that library. It is the decisions concerning allocation of tasks between professional and clerical staff which are important.

21. Book Acquisition

In the case of acquisition of materials the division obviously depends on which part of the job is being done. Table 9 gives a detailed breakdown of this. Book selection is the first aspect under this heading and is mainly an academic and professional activity. The large proportion of clerical work recorded at College D involved answering staff queries concerning books on order or in process.

The heading 'Ordering' indicates checking bibliographic details on lecturers' orders, checking copies already in stock, etc. and therefore considerable professional/academic time is involved in this area. Over half the time is clerical, however, except at College A where the fact that the ordering is carried out via the LEA has probably been instrumental in reducing this proportion to about 40%. Accessioning includes the unpacking of books, which is obviously a clerical task. The checking of invoices may be considered best done by either kind of staff, as may the accessioning process itself, but all four libraries agree in requiring a considerable amount of academic/professional time for this - varying from 17% at College G, where the small size of the professional staff influences the decision, to 70% at College D where accessioning is done at the same time as processing. Classifying and Cataloguing is obviously a professional task. It is worth noting the part played by the category 'extra' staff here, as until now they have usually been equated with the clericals. However, at College A they were library school students on field work who were given the classification of donations in which a backlog had accumulated; their work had to be explained and checked. At College G the extra member of staff was a qualified librarian employed on a clerical grade. Typing catalogue cards is work normally expected of clerical staff, except in rare instances of haste (as shown at College A). Colleges D and G both suffer from lack of typing power amongst their clerical staff, however, and therefore professionals are required to do their own cards, but both college librarians concerned see this as an unsatisfactory situation. Physical processing is work also normally undertaken by clerical staff except in a few odd cases of difficulty. The situation at College D is unusual here as 70% of processing is done by professional staff. This is partly explained by the fact that this library does very little processing to its books, only 26 hours went on this, compared with 78 at College E, 123 at College G, and 183 at College A, although it processed more books than either Colleges E or G and nearly as many as College A.

Much of College D's clerical time is occupied by the employment of evening and weekend supervisors who are not trained or employed to undertake any library work other than that included in manning the desk, issuing and shelving books. This severely limits the availability of this staff for other activities and the library compensates by cutting clerical type work to the minimum and using more professional time on what cannot be omitted. The proportion of clerical time at College D on final checking (44%) only represents three hours work and is probably atypical.

Filing catalogue cards is usually a professional task. At College A the time recorded by the 'extra staff' and some of the clerical time was spent adjusting the catalogue to accommodate a new cabinet. The rest of the clerical time was spent sorting cards into order. The large amount of Miscellaneous time recorded at College A included quick preparing of single items for a waiting user.

22. Periodical Acquisition

is generally considered to be mainly a clerical job with a reasonable proportion of professional work, presumably for such matters as selection, cancellations, ordering, etc. The exception is at College A where the work was almost entirely done by professional staff, partly because a new system was still being introduced.Following the appointment of an additional library clerk more clerical time is used, and this will be increased still further in the future to a level of about 40%

23. Audiovisual Acquisitions

The acquisition of audiovisual items has not been analysed in as much detail as for books because in most cases a smaller number of items was involved. However, at College E more audiovisual items were acquired than books, and a more detailed breakdown of some of the headings will, therefore, be given for this college. Time spent on Selection, Ordering and Accessioning is usually divided equally between professional and clerical staff.

Selection, Ordering and Accessioning

	A %	D %	E %	G %
Academic/Professional	50	70	44	-
Clerical/Extra	50	30	56	100

At College G, however, very little audiovisual material is being acquired at present and the task is left entirely in the hands of a clerical assistant at all stages. We have already referred to the problem created by shortage of clerical time at College D which is again reflected in the above figures. At College E all the clerical time in this area went on ordering 2,569 items and accessioning 1,775 items. Only 234 were selected and only 979 were received. There is, as yet, no agreement amongst colleges as to whether cataloguing and indexing audiovisual materials in professional or clerical work, in spite of the view that classification of books is professional work.

Only at College D is the job done entirely by professionals, and here the quickest time is also obtained. At College G, of course, the task is entirely clerical. At College A about 20% and at College E about 25% of the task is done by professionals. But at College A a further 45% was done by library school students during the Time Study, and it may be that they did work normally done by the professional staff. The librarian considers that it is a job which should, ideally, be done by such staff. At College D most of the Processing is also done by professional staff (note earlier comments on staffing matters there), but elsewhere this task is largely clerical work.

Processing

	A %	D %	E %	G %
Professional	1	80	45	-
Clerical	99	20	55	100

At College D only the minimum processing is carried out and many pictorial items are considered as ephemeral. Elsewhere dry mounting and lamination is carried out to a considerable degree, and at College E each part of multi-media kits is separately processed. The tape recording of items is only done regularly at Colleges A and D. At College A it is almost entirely a professional job, but at College D a third of the work is done by clericals. All the filing of audiovisual items at Colleges D and E is done by professional staff and very little time is spent on it. At Colleges A and G the task is more time consuming and includes clerical time.

Filing	A %	G %
Professional	39	-
Clerical	61	100

24. Stock Maintenance

The only part of stock maintenance included in the Time Study is general repairs and binding, as more major projects, such as stock taking, occur in the summer vacation. This work evidently includes considerable proportions of both professional and clerical work. At Colleges E and G it divides about equally but at College A it was mainly clerical, and at College D mainly professional. This is probably largely a reflection of the different types of work being done under these headings. At College A 35% of this time went on sending items for binding or reinforcing them in the library, 27% went on repairing items, 19% on transferring to BNBC, and 15% on transferring items from one section to another. A small amount of time went on the remaining headings of discarding, replacing lost books and preparing a sample list for stocktaking purposes. As stock becomes older, repair work (a clerical activity) increases, and there is more need for a discards policy (a professional activity). At College G 75% went on stocktaking and 10% on sending items for binding, with a small amount of time going on repairs and on transferring items from one section to another.

25. Circulation

This might be expected to be largely clerical work. The reason why the proportion is lower at College E is because there is no supervised issue system. At College A it has been the librarian's policy to man the counter with professional as well as clerical staff to deter theft, to supervise and give advice, because the layout of the library forces the issue desk clerk to be some distance from library and work rooms. However, this policy has been partially adjusted since the Time Study.

26. Internal Use

General Supervision is a professional job and shelving is obviously clerical work. Straightening is a task however in which it is reasonable to expect the whole library staff to take an equal share and, therefore, the proportion of each type of staff time on Internal Use will be partly determined by the balance of professional to clerical staff, as can be seen from the figures; e.g. at College E where there are two professional staff and three clerical, 41% of Internal Use time is professional. At College G where there is one professional and three clericals only 13% of the time is professional. It is worth noting here that there seems no reason why libraries should have such different staff balances and this will obviously affect the kinds of service the library can offer.

27. Interloan

This work is generally considered a mainly professional task, and three of these libraries put mainly professional time into servicing it. In two of them practically all the time is professional which may not be ideal. The librarian at College G remarked that the practice "could be faulted as (the professional) does all her own parcels." It is worth noting, however, that a College A this job is usually done by a senior clerical and was only carried out by a professional during the Time Study in the absence of the clerical. In comparison with the pilot study there is some evidence that the result was a speedier service.

28. Reprography: Photocopying

It is not possible to decide easily what kind of job photocopying is, as it depends on the type and situation of the machine, whether the work is for students or for staff, and whether the time recorded involves actually making copies for people or only servicing and advising on use of a photocopying machine. We can only note here that at Colleges A and E the library has no machine and when photocopying of library materials is undertaken, it involves a member of staff in taking the materials needed to a machine elsewhere in the college. At Colleges D and G coin-operated machines are available and the time recorded is, therefore, for servicing such machines or taking photocopies for library purposes. It is doubtful whether this latter should appear as 'photocopying' time. It would be more meaningful if, e.g. photocopying of an item to add to stock were included in acquisitions, photocopying of overdues, in circulation, photocopying of pages to send in connection with this project, under research, etc. In other words, in these circumstances the photocopier can be regarded in the same light as a typewriter. The time spent on this activity is minimal overall however.

29. Readers' Advice

is generally considered a professional task although some queries will inevitably be answered by clerical staff. This undoubtedly happens at College A, but because there is a readers' advice desk from which such recordings were made, queries answered by clericals are probably included under Circulation, as clerical staff would deal with simple queries at the counter. It is perhaps best anyway to keep the two levels of advice separate. At College E 78% of the time recorded by clerical staff under Readers' advice was spent on typing and producing a weekly subject index to periodicals. This also occupied 3% of the academic and 36% of the professional time under this heading. The remainder of the clerical time was spent answering queries, mainly from students.

30. Reservations

There is some agreement between colleges concerning the nature of Reservations work. In all colleges much of this is done by clerical staff, although the proportion varies from 60% to 84% As most such requests will be straightforward, but others will involve decisions about whether to purchase other copies, send the reader to a local library, put the book on restricted loan, etc. a reasonable amount of professional time is to be expected. It is worth noting that at the college where this amount is greatest the reservation system is new and extra time by professionals in starting it running smoothly will, therefore, have been needed. At College G, where the proportion of professional time is also high, there is no formal reservation system, and the total time spent on reservations was only 50 minutes.

31. Administration

must inevitably be mainly a task for the chief librarian although, in some cases, the day to day running of the library may be left to a senior assistant, as happens at College E. At College A there are two tutor librarians, so it is not possible to see how far it also applies there. A breakdown into three types of administrative activity at College E produces the following pattern.

	General administration	Policy making, etc.	Professional study
	%	%	%
Academic	26	81	66
Professional	41	19	34
Clerical	33		

About 20% of the administrative work is apparently clerical, all of this being of a general nature.

32. Teaching Programmes

The teaching programme is the one part of the libraries' work which one would expect to be completely carried out by academic staff, although some clerical support in preparing papers, setting up equipment, etc. may be called for. Table 13 in Appendix IV shows what proportion of this work is carried out by the various types of staff. Only at College A is part of the programme carried out by professional staff. At College D there is no academic and most of the teaching is done as overtime, when the librarian assumes the role of part time lecturer.

33. Displays and booklists is work largely of a professional nature and may be done, therefore, by either academic or professional staff. Bibliographic work will inevitably involve considerable clerical support work in typing and duplicating lists. At College D a shortage of typing power forces the professionals to do much of this work and this may be reflected in the lower proportion of clerical time on the job. The smaller publications programme at College G probably accounts for the differential there.

34. Registration is a task which could normally be expected to be satisfactorily performed by the clerical staff. However, in cases where clearance is needed before students leave and/or where caution money is taken, professional time may be needed in varying amounts according to the complexity of individual student situations.

UNIT TIMES AND WORK LOADS

35. Book Acquisition

It is only possible to produce unit times for some of a library's activities, most notably for acquisitions work. Full details of unit times are given in Table 8, Appendix IV. For Book Acquisition these were found to vary from 19.52 minutes per book at College D, to 37 minutes per book at College E. College A and College G's times were 26.2 and 29.69 minutes respectively. The very short time at College D was achieved by cutting down processing to an absolute minimum, as can be seen when we compare the processing times of 1.44 minutes at College D and 7.65, 6.96 and 16.8 minutes at Colleges A, E and G respectively. It is noticeable that the reason for the high unit time at College E lies in this same area of processing. This college has since arranged to have much of its processing carried out by the supplier and its unit time will now have become, therefore, about 23 minutes per book. Unit times for each part of this job have been calculated and can be found on Table 9 in Appendix IV.

36. Selection

The times for Book Selection are perhaps subject to some inaccuracy because, except at College E where all units completed were calculated separately at each stage of the work, we cannot be sure that the same number of units were selected during the Time Study as were actually handled. For detailed information on selection procedures used, see Part III B.

37. Ordering

For Ordering, the unit times for College A, 3.34 minutes, and College E, 6.9 minutes, are the most accurate as the actual number of units ordered was counted. At Colleges D and G (5.45 minutes and 10.67 minutes respectively) they were assumed to be the same as the number of units processed. The large unit time at College G was due to the fact that it uses BNB cards for retrospective as well as current purchases, and at the time this required considerable searching through back copies of BNB to find the order number. Since they are now ordered by SBN numbers the problem is mitigated, and the process is much less time consuming. The time at College A is short because books are ordered through the LEA store, and therefore some of the work connected with ordering and payment of invoices is done outside the college.

38. Accessioning

The unit times for Accessioning are very similar at three of the colleges:

	A	D	G
Minutes	2.95	3.08	3.62

but at College E the time was only 1.3 minutes per unit. This is because the book supplier took over Accessioning part way through the Time Study, the information being entered on the order card, thus slightly increasing ordering time (6.9 minutes as against 5.45 minutes at College D which has a similar order procedure). At College A accession number and date are written in ownership stamp in the book, and a copy of the order card is filed temporarily in the catalogue. At College D as well as rubber stamping the books in several places, the accession number is stamped on the date label and catalogue cards, but at College G the books are only stamped for ownership on the verso of title page.

39. Classification

The classifying times at three of the colleges are also very similar:

	A	D	G
Minutes	5.59	6.4	5.53

College A uses abbreviated 17th Dewey, but the London Education Classification for education reference stock. Colleges D and G use 18th Dewey, but at College D, 'Schools' Dewey is used for school and children's books. Both these colleges use BNB cards where possible and simplified cataloguing. At College D some reclassifying took place as a result of the transfer to 18th Dewey. The unit time at College E, where 17th Dewey is used in full for all books, was 3.5 minutes. This, however, was due to the atypical working speed of one assistant librarian at this college.

40. Catalogue Cards

The Typing of Catalogue cards took 1.2 and 1.8 minutes respectively at Colleges A and E, where the work is done by clerical staff. At College E these are not skilled typists and at the time a new employee was doing this work. At Colleges D and G the professionals do their own card typing, and the work took .48 and .72 minutes respectively. At College D, however, some of the typing time has probably gone into classifying or processing time since accessioning, classifying, typing cards and physical processing is all done, by professional staff, in one operation.

41. Physical Processing

This activity has the following range of times:

	A	D	E	G
Minutes	7.56	1.44	16.8	6.96

Methods at Colleges A and G are similar. Both mark the spine, College A using a label or stylus, College G using a stylus. Both affix date label and College G types the author, title class and copy numbers on it, while College A writes class and copy numbers on the book pocket. At the latter college a plastic book card has to be embossed for use with the Bookamatic charging system, and plastic covers are sellotaped on to the book. At College G, however, plastic jacketing is dealt with in the vacations when a large number of jackets are removed from books on the shelves, sent out to a commercial processer to be covered and then later reaffixed to the books with sellotape by library staff. At College E, processing involves pasting in a book plate, typing a book charging card and plastic jacketing. The process apparently took so long, partly because of the slowness of the typist, but the processing is now being done by the book supplier before delivery. At College D only a date label and book plate is pasted in. There is no card pocket or jacketing, and the number is written on the spine by the classifier as she classifies.

42. Final Checking and Filing

At College A checking includes checking that there are the right number of cards and a plastic card, and that all the details tally on the book plate and cards. At College G catalogue entries and class number are checked, but at College D, since most processes are done by one professional, there is minimal checking. The detailed accuracy check carried out at College E now takes longer because errors have to be referred to the book supplier.

TABLE 2 COMPARISON OF OUR UNIT TIMES FOR BOOK ACQUISITION WITH THOSE OF 10 UNIVERSITY LIBRARIES

		COLLEGES				UNIVERSITIES									
		A	D	E	G	1	2	3	4	5	6	7	8	Q	R
i.	Selection	1.56	1.38	3.8	.64	8.6	13.2		8.0	6.0	5.8				
ii.	Ordering-Selection to arrival of book	3.34	5.45	6.9	10.69	7.08	5.3	4.6	7.4					38	33
iii.	Accessioning - Arrival-cataloguing	2.95	3.08	1.30	3.62	9.3	7.0		9.5	8.3					
iv.	Classifying & cataloguing	5.59	6.64	3.5	5.53	10	8.0	16.0	10.0	10.1	5.5		10.3	69	24
v.	Typing catalogue entries per bk.& adapting BNB cards	1.2	.48	1.8	.72	4.4	2.5	4.4	7.0	4.5			3.5		40
vi.	Processing	7.56	1.44	16.8	6.96	4.0	7.4	1.0	2.2	6.7	4.4	3.8	2.4		
vii.	Final checking	.57	.42	2.3	.14	5.4	2.4		7.0		1.3	4.0			
viii.	Checking & filing catalogue cards per book	2.66	.74	.6	1.10	1.2		1.5	1.0	1.97		1.6			
ix.	Miscellaneous small tasks	.77	.13	-	.29										

43. It is interesting to note unit times obtained from similar investigations in some university libraries and compare them with the results from the four colleges. University libraries spend much more time on selection, accessioning, classification and cataloguing, producing catalogue cards and in general checking each stage of the process because such libraries have to select from a much wider field of literature, including foreign literature, and are sometimes subject to control of their selection by an outside body, which imposes additional processes. They spend much more time on full bibliographic detail in cataloguing. On the other hand the college libraries generally spend more time on physical processing because charging systems and a heavier rate of use require that books are labelled, spine lettered, covered, book carded and pocketed. Times for Universities Libraries 1 - 8 are from a private document, and times for A and R are taken from G.C.K.Smith and J.L. Schofield, Administrative Effectiveness, Times and Costs of Library Operations, Journal of Librarianship, 3 (4) October 71, p.p.253-4.

	A	D	E	G
Minutes	.57	.42	.[illegible]3	.14

At College A catalogue cards are checked against the order card at the time of filing. The cards are pre-sorted by clerical staff, and when filed in the catalogue, the copy of the order card is removed. At Colleges E and G cards are pre-sorted by clerical staff, whenever necessary because of numbers involved, at College G that is only when BNB cards arrive in bulk. At College D hand written 'finding' cards have to be removed and some refiling is often required because of mistakes which occurred when the original catalogue was created by students and staff in one day, when the library was new six years ago. College A's unit time includes time spent spreading the catalogue into an additional cabinet.

	A	D	E	G
Minutes	2.66	.74	.6	1.1

Miscellaneous tasks include some quick processing at College A, but otherwise refer to tasks staff could not codify.

	A	D	E	G
Minutes	.77	.13	-	.29

(For Section 43, see Table 2.)

44. Book Acquisition Work Loads.

The Acquisition of books is an important and time consuming task in all libraries, but the extent to which it absorbs staff time varies from college to college because the number of books each buys is not always in proportion with the size of the staff, in spite of the ATCDE/LA evidence to the Odgers committee which suggested that staffing levels should take into account bookfund amounts (see Section 1). It is possible to ascertain work loads per person for this activity by dividing the total books acquired in one year by the total number of staff in the library. For the four colleges the following work loads result for the academic year 1971/2.

	A	D	E	G
Acquisition of books per member of staff	1000	811	585	940

45. Periodical Acquisition Unit Times

The highest unit times for Periodical Acquisitions was at College A, but this included time spent on making a new card index to the collection. The periodicals room is some distance from the work rooms and back copies are transferred to one of five requisite sequences, on different parts of the library's three floors. At College E daily and weekend newspapers also have to be dealt with, as they do at College D. The shortest unit time was for College G, where new issues of periodicals are only put out on display once each week, whereas elsewhere they are put out daily, as they arrive.

	A	D	E	G
Minutes	8.69	2.42	5.75	1.19
No.of Issues	3930	3932	2070	1986

46. Periodical Acquisition Workloads

It is also possible to calculate the workload caused by periodicals in each college, per member of staff, as was done above for books; and the following results are obtained for the academic year 1971/2,

	A	D	E	G
Periodical issues acquired per member of library staff	393	603	345	397

Audiovisual Acquisition Unit Times

47. Selection, ordering, accessioning

The three activities, selecting, ordering and accessioning of audiovisual items were analysed together and, therefore, there may be more inaccuracy in these unit times since we cannot be sure that numbers of items selected and ordered during the period of the Time Study were the same as those actually received in the library, but the unit time has been calculated on the assumption that the same number of items was involved. This comment does not apply to College E, where all items were counted at each stage, and this single heading was separated into its component parts, producing the following unit times:

	Unit times	No.of Items
Selection	.35 mins.	675
Ordering	3.81 "	675
Checking in orders	2.75 "	357
Accessioning	2.59 "	686
Total	9.5 mins.	

College G's time of 8.42 minutes is nearest to this. At College G selection is carried out by departments from information passed to them by the library. Elsewhere the library staff do the selection. At Colleges A (3.68 mins.), E and G all items are accessioned. At College E gummed labels are used except for pictures where the number is written on. At College G the number is stamped on pictures, notes and folders and written on films and tapes. At College A expensive items are entered in an accessions register. At College D (unit time .77 mins.) 330 of the items were pictures which are not accessioned. It is not known how many were ordered. This time is very low and from the above figures for College E we can see that most time goes on ordering, therefore the lack of accessioning work does not explain this low figure. Perhaps hardly anything was ordered during this time. None the less, College E's time seems very high. At College G the large unit time may be due to the fact that very few items are handled.

48. Cataloguing and Indexing

Indexing took longest at College A (8.28 mins.). This college uses an open access system with a dictionary catalogue with separate files for each type of material which include information such as age, suitability and playing time of each item. Many items have two cards. The catalogue is two floors away from the work room, and some of the time recorded was spent building up an authority file. During the Time Study much of the work was done by library school students whose work had to be checked. At College E, where the unit time is 5.8 mins. the collection is closed access and cards are colour coded to show equipment needed; analysis of content of multi-media kits and files, and age suitability are also included. At this college separate unit times for this activity were obtained for each type of material as follows:-

	No.of items	Unit time
Films	11*	21.3
Archive units	74	17.39
Overhead transparencies	82	11.4
Tapes	61	10.1
Programmed tapes	12*	9.52
Filmstrips	63	7.76
Slides	205	3.06
Pictures	400	2.58
Multi-media kits	5*	2.28

*Too few units for unit time to be accurate.

At College A most of the units added were slides and pictures, but there were also 90 filmstrips and 35 records. Of the 16 tapes, 12 were made by the staff from broadcast programmes, 42 broadcasts of about 15-30 minutes duration each being made. At College G the unit time was 3.14 minutes, but the items included some cuttings which are not indexed. It is an open access collection with a separate simplified catalogue. At College D (.28 mins) more than half the items, the expendable pictures, were not catalogued. Items are stamped with a simplified Dewey number and kept on open access.

49. Physical Processing

Physical processing took 6.41 and 5.8 minutes respectively at Colleges A and E, where pictures are bound, hole punched and mounted where necessary. At College A, typing accessioning number on labels for slide frames, tape boxes, etc. is included and some slide mounting occasionally takes place (taking 1.5 minutes per slide). At College E lamination of pictures, accompanying notes and pictorial parts of multi-media kits also takes place. Separate unit times for processing each type of material at this college are as follows:-

	No.of items	Unit time mins.
Films	11*	6.75
Archive units	76	17.9
Overhead transparencies	82	4.62
Tapes	61	.41
Programmed tapes	12	5.71
Filmstrips	None	
Slides	205	.98
Pictures	590	6.66
Multi-media kits	1*	13.71

It is noticeable that the two types of item with many parts (archive units and multimedia kits) are most time consuming. At College G the unit time is 3.65 mins. and includes binding or mounting pictures, and writing some cards for film strips and records. At College D most items are not processed and the unit time is 1.01 mins. Only Colleges A and D tape record items (unit times .58 and .22 mins. respectively), but it is possible that not all the time on this activity has been included under this heading at College A.

50. Filing Audiovisual Materials

The filing of items at College A is quite time consuming (1.79 mins.) because of the geographical layout of the building. Pictures have to be filed in subject order, two floors away from the audiovisual work room. The professional librarian was also hampered by staff changes during the Time Study. Quite large proportions of College A and G's unit times went on miscellaneous activities (2.94 and 3 mins. each). These included answering queries and pursuing unfulfilled orders. At College G all the work done by the professional staff was included here, as it was too small an amount of time to separate (see section 23).

51. Conclusion

The overall unit times for the acquisition of audiovisual times was as follows:

	A	D	E	G
Minutes	23.68	3.45	21.3	29.96

as was the case with acquisition of books,unit times for each part of this activity were also obtained (see Table11 in Appendix IV). This is a new area of work in most libraries and methods are still under review. It is likely that, in future, the work involved will become increasingly similar to that for books; when fully fledged Resource Centres are introduced in colleges, however, this activity may include considerable time making materials.

52. Work Loads for Audiovisual Materials

The number of items acquired per year per member of staff can also be used to calculate comparable work loads for audiovisual materials. However, it must be remembered that, as shown for College E's figures, some kinds of items are very much more time consuming than others and when the proportion of each type varies considerably between colleges the resultant work loads will not be completely comparable (for a discussion of incomparability resulting from different methods of working,see Section 64).

	A	D	E	G
College work loads	110	77	667	40

53. Circulation Unit Times

The overall unit times obtained for the three colleges with a supervised issue system were College A, 2.65 mins., College D, 3.79 mins., and College G, 4.9 mins. The unit time for College E with unsupervised system was 2.06 mins. Attempts were made to obtain separate unit times for different parts of the job, with the following results, shown in Tables 3 and 4.

TABLE 3

College E

	Mins.
Issuing one ordinary book, including answering related queries	.45
Returning one book	.6
Shelving one book	.45
Dealing with overdues, etc. per book	.1
Policy decisions per book	.1
	1.7
Issuing one restricted book	3.7
Returning one book	.6
Shelving one book	.45
Dealing with overdues, etc. per book	.1
Policy decisions	.1
	4.95

(actually made up of 960 books at 8.1 mins. each and 1442 journals for Internal Use at 3.6 mins. each)

Issuing one audiovisual item	.5
Returning one AV (including shelving)	.4
Dealing with overdues	.1
Policy decisions	.1
	1.1
Average for all materials	2.1

All these units were calculated from the actual time recorded during the time study; since at College E the recording and analysis were carried out at this level. This was not possible elsewhere because circulation activities at the service point were taken from the staff time table (see section 4).

TABLE 4.

College A

		Mins.	
1.	Physical process of issuing one book	.2	found by stop watch timing of all staff at random intervals
2.	" " " returning one book	.1	
3.	Cancelling charge for one book	.6	estimated with reference to College E.
4.	Time helping students at counter in connection with book issues	.4	estimated
5.	Shelving one book (not including sorting)	.2	found by stop watch timing
6.	Sorting one book (ready for shelving)	.35	estimated with reference to College E's overall shelving figure.
7.	Overdues, etc.	.1	estimated
		2.05	

1.	Physical process of issuing one Audiovisual	.4	found by stop watch timing
2.	Physical process of returning one Audiovisual	.3	
3.	Other work with returned Audiovisual (sorting issue slips)	.6	estimated
4.	Time helping students choose Audiovisual	.4	estimated
5.	Shelving one Audiovisual (excluding sorting)	.2	found by stop watch timing
6.	Sorting Audiovisual	.35	estimated
		2.25	

Restricted loan: as for ordinary book except add opening book case	.2	estimated
	2.25	

Average time on all types of material is 2.1 mins.

It is interesting that the average quantifiable time for both colleges is 2.1 minutes, although College E's is only that high because of the large number of restricted loan issues handled, and the long time these take. At this college we have been able to account for the whole of the time recorded as Circulation; i.e. the unit time in Table 3 is the same as that originally discovered from the Time Study. However, there is a difference of about .5 minutes between the two unit times, if our estimates are about correct. We believe that this time is accounted for by the activities involved in supervising the counter. A system requiring constant attendance, overview of users and reader contact, is bound to absorb some extra time not immediately applicable to any particular timeable activity. Some of this probably includes answering users' general questions.

At Colleges D and G no detailed breakdown of this sort has been attempted. However, some estimates have been possible. At College G most activities were recorded on a separate service point form, and exactly what this included is not known precisely. However, issuing of audiovisual materials was recorded on a separate form. Thus at least two times can be obtained, one for all activities concerned with books and a similar one for audiovisual items. It also proved possible to calculate how much of the book unit time went on shelving. Since this college accumulates its returned issue slips, and then counts them at the end of each term, the part of the book unit time for this could also be extracted.

College G		
Audiovisual unit time	3.6 minutes	1415 items
Book unit time	5.0 minutes	9051 items

Breakdown of book unit time	
Shelving (not including sorting)	.8 minutes per book
Counting the issue	.35 minutes per book

Some of the time for the following activities may have been recorded at the counter: but at least that amount indicated was spent on the task referred to.

Sending overdues	.3 minutes	per	book
Answering queries	.1 "	"	"
Date stamping prior to shelving	.1 "	"	"

Practically all the remainder was spent on the issue and return of books, and the sorting of slips and books. However, there is internal evidence from College G's recording sheets that much of their relaxation allowance was included in the time recorded. This was most likely to happen in the case of Circulation where they recorded large amounts of time at the counter; sometimes over three hours are indicated as spent on Circulation at a stretch. This happened, very much less, at the audiovisual service point. If most of that part of the relaxation allowance which we found to be missing for College G (see Section 5) is assumed to have been lost in the Circulation times recorded, and if we remove this, it will bring the book unit time down to 4.6 minutes and the overall unit time down to 4.4 minutes (previously 4.9 minutes).

At College D time was estimated by the librarian for the actual process of issuing and returning a book, with the following results:

To stamp book and check reader's cards	.3 minutes
To file slips in two separate places	.2 "
To remove slips and clear book on return	.6 "

Where books carried fines, an extra	.3 minutes	per book
Where books are reserved, " "	.3 "	per book

but it is not known what proportion of books were involved. An extra .6 to .9 minutes is estimated as being spent by the reader completing his own slips, this is user time saved, therefore, in those systems where the reader does not need to perform this chore. In addition, reader completed slips are more likely to contain inaccuracies or be difficult to decipher, thus increasing staff time at a later stage.

Extra problems probably arise at College G where the reader does initial filing of his own slip, thus making it possible for him to occasionally borrow books without issuing them to himself, in spite of the supervised gate. When books are returned they are placed by the reader on a "Returned book" trolley and students occasionally borrow these without the previous issue having been cancelled, causing a further increase in staff time sorting out resultant confusions. In addition, it is possible that "illicitly borrowed" items might be returned to this trolley. In this case, the staff will search the issue for the charge in vain, and more books will have been involved in staff circulation time than were counted in the issue statistics. A comparison of College A's and College D's estimates for the physical act of issuing books (ignoring the students' part at College D) suggests that the slip system takes longer:

College A		College D	
Issuing	.2 minutes	Issuing	.5 minutes
Returns	.6 "	Returning	.6 "

Otherwise the greater unit time at College G is probably explained by the lower issues being made, even though the counter has to be manned for as many hours. The greater time at College D is evident from their long opening hours, and the employment of staff in the evenings and weekends, as supervisors only.

54. Internal Use

No unit times for activities concerned with internal use were obtained from the Time Study but timing experiments carried out later did produce some times (see Section 19). The following unit times for straightening (putting books in order on the shelves) were obtained:

	A	D	E	G	
Minutes	2.7	1.8	1.2	1.3	per shelf

Obviously, the length of time this activity takes depends on how disorganised the shelves are to begin with, and if the job is done regularly a lower time should be obtained. The nature of the material also affects it. At College A the large number of small items per shelf in the school services library made those shelves more time consuming than the others. The tightness of the shelves and the accuracy with which users return materials to the shelf will also be relevant. At College D two timings were obtained. The one quoted above refers to the time taken to straighten after one week's disarray. This is the desirable level of frequency which a library may realistically aim for. However, they normally only achieve straightening during vacations and with about half a term's disarray it took 2.9 minutes per shelf.

At Colleges A and G timing experiments were also carried out to ascertain length of time taken to shelve books. At College G, two people were timed shelving books which had been placed from trolleys onto tables near the right shelves and a third person shelving books from tables during the vacation. An average figure for three staff was .38 minutes per book. At College A an artificial situation was created, one hundred books were spread around the library, since internal users often use books in rooms other than where they find them. Only one assistant was timed and a unit time of .51 minutes was obtained.

55. Book Use Work Loads: Internal Use and Circulation.

The numbers of books and audiovisual items issued per member of staff per annum in these four colleges were as follows:

A	D	E	G
10560	9751	8497	7840

There are no comparable figures for books used internally, but the above gives some guide since the amount of book borrowing reflects the amount of internal use. The survey of use (see Part VA) and failure surveys produced some internal:external use ratios (see Part II). Two counts of books left on tables at College A gave ratios of 2:5 and 1:3. Since we are only interested in that part of internal use which results in shelving by staff, these are obviously the relevant ratios for our purpose. At College G according to the failure survey the figure for proportions of items needing shelving by staff was 25% of the total used internally. At College D students are requested not to reshelve lending materials consulted internally, but to shelve reference books and periodicals. Probably at least 50% of their materials are shelved by the staff. From the small amount of time spent shelving at College E, it is assumed that about 15% of books are shelved by staff there. To calculate the proportions of books needing to be shelved at the other colleges therefore we need to find the ratio of books used internally and not shelved. If the internal:external ratios are as follows:

D	E	G
2:1	2:1	4:3

and the proportions of internally used books left on the tables are:

D	E	G
50%	15%	25%

then the ratio of books to be shelved to books borrowed will be

D	E	G
1:1	1:3	1:3

If we take College A's ratio to be 1:3, workloads per member of staff per year will be:

	A	D	E	G
Shelving	8640	9360	2783	2612

Another way of calculating number of books to be shelved is as follows:

Let a = number of books shelved during the Time Study
Let b = number issued during the Time Study
Let c = " " " year

$$\text{Then } a = \frac{\text{Time Study hours shelving}}{\text{unit time per book}}$$

Then a:b = ratio of books shelved to books issued and $\frac{a}{b} \times c$ = books shelved per year.

If this method is used, and the unit time per book is taken as .5 minutes, the following workloads result:

	A	D	E	G
Shelving	4545	5897	850	2130

If the above are correct, either the internal:external use ratios used for the first figures are inflated, or shelving during the Time Study was carried out more quickly than the timings at Colleges A and E suggest, or not all the shelving was completed at these colleges, (but see Section 19).

Work loads for Straightening can be calculated less problematically by dividing the total stock by the number of staff, with the following results:

	A	D	E	G
Straightening	8399	9231	7351	8262

Initially we attempted to calculate workloads for straightening according to the number of shelves in the library. This was found to be inaccurate because Colleges A and D have about the same number of shelves and yet College A has a much larger stock to be straightened. Presumably their number of items per shelf is greater. This factor will also explain their high unit time per shelf straightened (see Section 54). Using stock figures as the unit for calculation also has the advantage of allowing audiovisual materials to be included.

56. Interloans and Reservations Unit Times

The range of times for interloans is very wide. The shortest time, at College E of 14.7 minutes coincides with a large number of units being completed, 80 during the Time Study, but the next shortest time, 16.8 minutes occurred at College D where 10 were acquired. This library is new and still building up its stocks and, therefore, usually chooses to buy requested items. At College A the unit time (20.52 minutes) includes making a duplicate hand-written entry for all items in an exercise book. This library only used NCL and NLL during the Time Study. Most requests come from staff and fourth year B.Eds. and users are encouraged to try first the very good facilities at local libraries. College G's unit time is 23.71 minutes. These requests were not necessarily the same as the loans received, or those returned. Thus the unit time includes packing and unpacking time only for items received and/or returned. The actual figures for the Time Study period were as follows:

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	A	D	E	G
Requests	86 *	10	80	40
Receipts	59 **	8		25
Returns	54	8		16

* includes 7 cancellations
** includes 4 renewals

Thus the unit time does not include, for any of the colleges, all the time taken receiving or repacking all these items.

College A has the highest reservation unit time, of 14.42 minutes. This is because the charging system prevents reserved materials being stopped in the issue as the Bookamatic slip is filed in transaction number order. Reserved items are, therefore, listed on a visible index and all returned books are checked against it. This ensures that the first copy returned meets the reservations. This board is also used to indicate missing books which are searched for on the shelves. The part of the issue due back that week is also sometimes checked to be sure no reservations are missed, but this is a very difficult and slow process as the quality of the print on the slips is often poor. College D has only just started its reservation system, but it has proved immediately popular and they achieved the very quick time of 5.52 minutes. College E's reservation system (unit time 9.10 minutes) is a very heavily used service, 735 reservations being made during the Time Study. A new assistant was doing the work at this time. College G has no formal reservation system.

57. Reservation and Interloan Workloads.

Annual workloads per member of staff for these two areas of work for the year 1971/2 were as follows:

	A	D	E	G
Interloans	27	6	80 *	43
Reservations	134	77	122	-

* estimates

It is interesting to note some connection between amount of reservation work and number of interloans sought, and it is surprising that a library with as many interloans as College G finds no need for a formal reservation system, though this may partly be explained by the fact that it is a small college where most students probably know each other and reservations are made informally, by the library staff telling a reader who has the book.

58. Reprography: Unit Times

At Colleges A and E there is no photocopier in the library, and staff take reference materials to be photocopied elsewhere in the college. The unit times given are for the whole transaction and it is not known how many pages were made in each case. Colleges D and G have coin-operated machines on library premises and, therefore, unit times are not readily obtainable (see Section 28).

	A	E
Minutes	17.9	38.2

None of the other activities have a calculable number of units and therefore no unit time is obtainable comparable with those discussed above. However, estimates of time taken and needed, of backlogs and workloads can be made in most of these areas.

THE YEAR'S WORK IN THE LIBRARY.

59. Applying Time Study data to a complete year.

For several reasons it is worth using the information obtained from the Time Study in conjunction with the libraries' own statistics and the librarians' information on work done, to draw up a complete picture of the library's year. Firstly, various workloads fluctuate because of teaching practice periods, examinations, vacation etc. which are not in the librarians' control. Therefore other activities are moved to quieter times when the library staff can complete them. The proportions of time spent on each activity we investigated (see Section 6) may be different over a whole year. Secondly, if we are to ascertain what staff are needed to complete all the library's tasks, we must discover what these were for an actual period and where possible, use previous annual statistics to predict how far they are likely to vary in the future, then budgeting from need can take place based on good predictions of that need and of how much staff time is required to fulfil it. Therefore, information on work output and input for the year 1971/72 was used to draw up a full year's picture. There is a discrepancy between input and output as all libraries have backlogs in some areas. It was possible to discover how far the projections were accurate. The work believed to have been completed during the year was converted into time by using the unit times and proportions obtained during the Time Study. The total time worked thus indicated was then compared with the total time available for work from the staff that year.

The differences between the total hours calculated as worked during the year and the total hours calculated as available from the staff concerned were as follows. Minus means that more hours were apparently worked than were available.

	A	D	E	G
Difference in hours	+ 311	+ 294	- 1488 *	+ 40
% of total time available	2%	3%	12%	.6%

* This may be partly due to an even greater level of overtime by the academic member of staff than occurred during the Time Study.

60. Ascertaining total time spent per year on activities for which hard statistics of units completed and unit times were available.

In some areas of library work there is no problem in ascertaining the total number of units of work coming to and/or being completed by the library. Most librarians know or can find out from the records how many books, periodical issues and audiovisual materials were acquired in any one year. If the number added to stock is different from those acquired this also can be calculated by reference to accession numbers, by counting new items listed on stock records or by counting stock awaiting processing and subtracting the result from the number acquired.

If the relevant statistics are kept, there is also an immediate record of work completed in the following areas; items issued, reservations and interloan requests and, where relevant, items photocopied. Where changes in procedure will have affected the unit times for any of these activities, they must be taken into account in all calculations made. The total number of units multiplied by the unit time will then produce the total hours needed or taken to complete work in these areas. To ascertain how much work was done by each type of staff, the time obtained is then divided according to the proportions pertaining during the Time Study, again making any adjustments required because of known changes in circumstances. For example, it has been noted that interloans, normally a clerical task at College A, was done by a professional for part of the Time Study. The time recorded by library students at this college requires similar reallocation.

61. Activities for which units are not known

For the remaining activities, ascertaining the total units for a year is not so straightforward. We cannot assume that the same amount of time will be spent on each during the remaining 40 weeks of the year as was spent during the 12 or 13 weeks of the Time Study, for the reasons referred to in Section 59. Nor can a number of units be taken from library statistics. In many cases it has not even been possible to produce a unit time.

At least for Internal Use, some evidence for unit times has been obtained (see Section 54) and fairly certain units can be ascertained for straightening. The library knows or can easily count the number of shelves used in the library and the librarian has some idea of how often the whole library is straightened per term. From the times obtained by means of timing experiments, a total time spent straightening during the year can then be obtained. Likewise the librarian can estimate how long it would take to do the job if the library were straightened more regularly, if he first decided just how often per term it did need to be done.

For shelving of internal materials the matter is more difficult as we have already noted the difficulties involved in discovering how many books are used and left out on tables (see Section 54). If the number of hours recorded for shelving during the Time Study is divided by the unit time obtained for shelving books at College A, it should be possible to calculate how many books were shelved during the Time Study, assuming that this unit time is accurate and applicable elsewhere (see Section 55). It assumes that the relationship between books borrowed and books used and left on tables is constant.

There are some areas of work for which no units or unit times have been referred to, but for which a unit can be calculated in some sense. For readers' advice work the unit is the number of users, i.e. the total staff and students of the college. From the Time Study we can calculate how much time was spent per week in term time on average on each student and interpolate for the whole college year. The results obtained for the four colleges for the year 1971/2 were as follows:

	A	D	E	G
Minutes per year per student/ staff member of college	25	13	34	8

The librarian also knows how many periods of instruction he gives in a year and how many he gave during the Time Study. But not all the preparation for these may have fallen in this period. In fact, because the summer vacation fell prior to the commencement of all four time studies, much preparation will certainly have been done outside this period. Therefore, it is not possible to calculate how much time is involved per period just from the Time Study evidence and more estimation is needed.

Units could also be calculated for library publications since a library must know how many it produced, but again the complete work for any one bibliography may not have fallen within the Time Study period and certainly, since again the bulk of these will have been done during the summer vacation, only a very rough estimate of time taken can be obtained. Only at College E does the library have a large and regular programme of publications. Here, the librarian timed the clerical staff typing, duplicating and collating copies of three bibliographies and listed all those produced during one year, estimating her own time preparing them and estimating clerical time with reference to her timing experiment and taking into account the size and number of each publication produced. A full list can be found in Table 15 in Appendix IV. In some cases her own time on this task included reading books, especially children's books and most of this work was done as overtime. Although numbers of displays could be calculated, librarians do not always keep a note of the displays they set up and so no accurate time for those during the study nor estimate for the whole year can be made. The best estimate can probably be arrived at by assuming that the amount of time in the Time Study refers only to term time weeks and thus calculating the amount of time spent per week in term time and multiplying the number of weeks in the college year.

Again College E is the only library with a full programme of displays over and above the regular use of library display points. Seven different types of display occurred during the Time Study. Two further types of display did not occur during the study but examples were subsequently timed by the librarian. She also listed all displays held in the year and indicated which type they were. Thus, full times for the year can be calculated. (See Table 15, Appendix IV).

There remains one activity for which we have no unit time but for which there is a unit, namely Registration. The unit here is all the first year students at the beginning of the year and all the third year leavers and fourth years at the end. However, some work recording address changes and withdrawals will arise from the whole student body throughout the year. Because registration time occurred during the Time Study at College A a fairly accurate figure for this part of the task can be obtained. Elsewhere it is necessary to rely on librarians' estimates, but it is never a very large area of work and at College G the library does not register the students.

62.Activities for which no unit is applicable

There remain two areas of work for which no unit is applicable. It can be argued that the unit for stock maintenance is the total number of items in stock and where stock taking is concerned this is the case,even where a sample check is used at College A. However, since, except for the first week at College A, the Time Study period did not include the summer vacation, when stock taking takes place, no evidence for this was produced. However, in some colleges the librarian knows how long is spent on this task because for a certain period during the vacation all staff time is allocated to it. Thus, at College E, stock taking occupies a full week's work for all staff and the amount of time spent on the job, therefore, is the number of staff x hours worked per week. Some libraries carry out weeding and stock editing in the same way. Elsewhere this is a more 'ad hoc' task. The remaining work included under this heading is repairs, general replacements and binding. The only estimate for this per year which can be made is one based on the assumption that the amount of work does not vary greatly during the year and that, therefore a figure for the 52 weeks can be interpolated from that obtained from the Time Study.

The remaining area is concerned with Administration of all types, including attending committees, forward planning, professional study, etc. The only part of this for which units of any kind can be obtained is committee work, where the number of committees of which the librarian(s) is a member, multiplied by the number of meetings of each per year can be used. However, some areas, such as showing visitors round and preparing estimates were calculable at College E. Otherwise, it is only possible to assume that Administration as a proportion of the total work must always remain fairly constant in each library and calculate it accordingly.

63. Results of Annual Projections

Full projections to show use of time in each library for the year in which the Time Study occurred were made. These are set out in Appendix IV, Tables 18.1 to 18.4, along with notes to indicate differences between Time Study situations and annual situations and any changes in unit times or staff proportions. If the amount of work during the year was exactly in proportion to that during the Time Study then the hours worked during the year will be equivalent to Time Study hours x 4.33 (except at College E where the Time Study lasted 13 weeks and the formula would be Time Study hours x 4 = equivalent annual hours). However, in all colleges there were considerable variations in certain areas, notably stock maintenance, lectures, bibliography and display and the result is, of course, that proportions of time spent on various activities over a year are rather different from those occurring during the Time Study and discussed in Section 6. Below are the two sets of proportions for each college for comparison. In studying these it must be borne in mind that in some cases the amount of time per year for a particular activity has been estimated, with varying degrees of accuracy. (See Sections 60 to 62)

TABLE 5

	Time Study A %	Year A %	Time Study D %	Year D %	Time Study E %	Year E %	Time Study G %	Year G %
Book acquisition	15	18	17	18	11	13	27	27
Periodical acq.	2	4	2	2	2	1	0.5	0.5
AV acquisition	4	3	2	1	10	11	1	1
Stock maintenance	2	4	0.9	2	0.2	3	2	5
Circulation	35	30	42	41	23	14	39	37
Internal Use	10	9	8	6	5	5	2	2
Interloan	0.7	0.8	0.1	0.1	0.7	0.2	0.9	1
Photocopying	0.7	0.7	2	1	1	1	0.4	0.4
Readers' Adviser	4	4	2	2	14	10	1	1
Reservations	3	2	0.7	0.5	4	2	.04	-
Administration	11	12	13	15	16	16	15	15
Teaching, guidance and display	5	4	7	7	10	20	4	4
Registration	2	2	0.1	1	0.2	0.3	-	-
Research	5	5	5	5	4	4	6	6

(Whole percentages have been used here. Except for proportions of less than 1%.

For more precise Time Study percentages see Table 5 in Appendix IV)

TABLE 6 WORKLOADS PER MEMBER OF STAFF

College	A	B	C	D	E	F	G	H
Stock								
Books	6938	7879	10383	8462	5401	10239	7350	16827
Audiovisuals	1461	308	137	769	1950	2180	912	N/A
Issues	10560	3367	9167	9751	8497	10278	7840	14404
Interloans	27	303	33	6	80*	102	43	25
Reservations	134	530	46	77	122	104	N/A	154*
Acquisitions								
Books	1000	758	1100	811	585	883	940	3308
Audiovisuals	110	76*	25*	77	667	300*	40	N/A
Periodicals	393	515	638	603	345	515	397	842
Students and Staff	170	187	176	142	163	141	158	372
TOTAL	20793	13923	21705	20698	17810	24742	17683	35932
Library staff	10	6.6	6	6.5	6	6	5	1.3

* estimated.

64. WORKLOADS PER PERSON

With the same statistics as those which have been used to obtain hours per year per job it is possible to calculate average workloads for each member of staff in those areas where units are available. Relevant examples of these have already been used in Sections 44 to 57. All these figures are obtained by dividing the total number of units by the total library staff. As well as those listed as being directly relevant to some of the activities for which unit times were also obtained, work loads for various other spheres of library work can also be calculated. Measuring library business and staff productivity by means of these average work loads has the advantage that they can be calculated for any library which keeps the relevant statistics. They enable a comparison of the amount of work in at least some areas of library management to be made on a fair and comparable basis between libraries with different staffing. Thus, relative productivity can be assessed, but without reference to those areas for which the necessary information is unavailable and without any attempt being made to calculate the time involved on these jobs.

Table 6 shows all the work loads which could be obtained from available statistics, in the eight colleges. In some colleges certain statistics such as annual issues are not kept. In these cases estimates have been made. In the case of issue statistics these are made with reference to figures recorded for the weeks of the survey of use (see Part VA). The estimated figures have been asterisked.

Unfortunately, although comparison of work loads in each area can be made between colleges, the total loads cannot fairly be compared. This is because they are made up of items which are varyingly time consuming and a library with a lower total may have, in fact, more work to do because a higher proportion of that total is made up of major tasks. An attempt has been made, therefore, to weight each activity according to how time consuming each unit of it is, deciding on this, whenever possible, with reference to the relationship between unit times obtained during the Time Study for each activity. A weighting of 1 was given to each issue and all other weightings were calculated from this base, by saying, e.g. one book acquisition takes, according to the Time Study evidence, ten times as long as one book issue,one student receives advice etc. lasting about five times as long as it takes to issue one item, etc. The following weightings were used:

Stock		Acquisitions	
Books	1	Books	10
Audiovisuals	1	Audiovisuals	6
		Periodicals	2
Issues	1		
Interloans	6	Students /staff	10
Reservations	4		

The result of multiplying the work loads by these weights gave total work loads for each library as follows:

College A	32803	College E	28988
B	26428	F	36795
C	34255	G	28374
D	30524	H	70481 *

* Student volunteers help in this library. For further details see Table 15.2 in Appendix IV.

There are three serious objections to this method. Firstly it is not clear to which unit time total stock relates. We have assumed that the area of work concerned is stock maintenance, but that does not give us a unit time. Nonetheless, if our assumption of a weighting of 1 for this area is too small, doubling it would only alter the figures as follows:

College	A	41202	College	E	36339
	B	34615		F	49214
	C	44775		G	36636
	D	39755		H	87308

and halving it only has this effect:

College	A	28603	College	E	25312
	B	22334		F	30585
	C	26995		G	24243
	D	25908		H	62067

thus in neither case seriously altering the positions.

Secondly, and more serious, the method ignores differences of methodology between libraries which produce differing unit times and likewise different relationships between unit times. Thus, it has been assumed that the relationship between time to issue and time to acquire one book is 1:10 but at College D which has the lowest acquisition time of 19.52 minutes and a high issue time of 3.79, the relationship is 1:5. Other similar variations can be found by referring to the unit times shown on Table 8, Appendix IV. It is not satisfactory to ignore these differences as, although in some cases a higher unit time may be a result of a less efficient system, in many cases they are the result of differing circumstances outside the librarian's control and in other cases the highest unit time is the most satisfactory figure because the lower units are the result of backlogs in that area. This is the case for readers' advice for instance. If reasonably average relationships between the relative weight of various tasks could be agreed by consensus between librarians, at least within reasonable tolerance limits, figures of this type could be useful. It must be remembered that the total figure should not be turned into an amount of time, but merely taken as an index to relative productivity, all differences in the circumstances of each library being ignored.

Thirdly, these workloads do not include some types of library activity, including administration, bibliographies, part of internal use etc. Amounts of work in these areas will also vary with the result that some of the apparent differences in loads between libraries would change quite drastically, if these other types of load could be added. (See Sections 6 and 73-6).

65. PREDICTING FUTURE STAFF NEEDS

So far we have only investigated the actual situation in existence in these libraries during the year 1971/72 and more specifically during a twelve week period of that year. However, information of this sort is only of practical use in so far as it can be used to indicate the amount of staff time needed in the future. There are four ways in which the staff time needed may differ from that which we have found to be used at present. Firstly, we have noted already the presence of backlogs in some areas of work. These are of two types. There is the easily calculable backlog such as items in the library but awaiting processing before reaching the shelves. Backlogs of this nature are a waste of the libraries' resources. Materials have the most useful period of their life when they are new and it is poor economy of use for them to be unavailable to users during the first year or even two after their publication. Backlogs in straightening cause similar frustrations in that they prevent users from finding available items and again result in poor exploitation of stock (see Part II Sections 14 - 16). The other type of backlog is less easily calculated, but is no less serious. It concerns such activities as readers' advice. If insufficient time is available to enable all users to obtain professional help as and when they need it they will inevitably make less use of the library's facilities, to the detriment of their studies and teaching, and again resulting in under-exploitation of valuable library stock.

Secondly, there are some activities which some colleges are hardly able to undertake at all, or which they are doing on a very much smaller scale than is needed or is done elsewhere. This includes the production of displays which bring materials to people's notice, both in and outside the library and which can also be used as a useful teaching aid in connection with college and library courses, conferences etc., (see details of work undertaken at College E in Table 15.1 Appendix IV). Also included here is lecture work, production of bibliographies and opening hours during which full services are available, all of which are areas of work where the amount provided from college to college varies considerably. No librarian, with his existing staff, has been able to offer adequate amounts of all these services and some have chosen to concentrate on some areas and some on others. (See details of librarians' descriptions of their own backlogs in Table 16, Appendix IV). As Roberts has noted:

> "Colleges of education exhibit a lack of uniformity in library provision that is somewhat surprising in view of their commonness of purpose. Library adaptations to the individual circumstances of colleges are diverse and sometimes strange" ...."it is difficult to visualise the colleges as institutions with the same broad aims."

Thirdly, there have been already considerable increases in work loads in the last few years as a result of the introduction of B.Ed. courses and changes in teaching methods towards those which involve more private study on the part of students. At the present time more colleges are changing from exam. based to continuously assessed courses, often including dissertations and special study work by individual students. These changes are likely to involve the library in greater work in the fields of bibliography and inter-library loans, as individuals require materials of a more specialist type, and training in library use, as students find it necessary to make more subject searches, rather than finding specific titles only. In addition, the introduction of greater proportions of audiovisual materials will increase use and guidance needed in this area. Book issues are still increasing in many colleges, although it is not possible to know at what point, if the user population remains the same, a watershed will be reached in this category of use.

Fourthly, there is a need in some libraries for a change in the type of personnel who do various jobs, which will affect the balance of staffing. We have noted, for instance, at College D, the problems caused by lack of clerical time for processing.

In addition, as libraries grow, the possibility of employing other types of labour must also be considered. Some college libraries find that, although they have clerical assistants, the gradings available do not enable them to employ typists, who need a fair level of competency if they are to produce catalogue cards. It is worth considering employing a certain proportion of the clerical staff at each library specifically as typists. There is also a need for shorthand typing and secretarial assistance to the librarian. In addition some library work involves considerable lifting and carrying. In a large building quantities of books may need regularly to be carried long distances. It is not work ideally suited to the young girls and women who predominate on library staffs. There is a case here, therefore, for employing manual labour for some of the clerical hours needed. As well as shelving books and carrying parcels, they could be employed as exit supervisors and may be more successful in deterring theft than other types of staff.

Technical assistance will become increasingly necessary as more libraries become resource centres and stock large amounts of hardware, perhaps lending it out as well as software. If and when libraries also become heavily involved in making material, this will be even more imperative. Such technical staff needs have not been considered in our staffing estimates. They should be employed for time over and above that later indicated as needed for audiovisual materials. It is likely that at least one half time technician is needed in any college with over about 5000 audiovisual items, with more time pro rata as the stock increases. Additional time will be needed if a large amount of hardware is stocked.

66. ADJUSTING TIME STUDY TIMES AND STAFF PROPORTIONS

Some of these factors affect the unit times obtained. If a new activity which is needed in a particular college and which is part of a larger activity for which a unit time has been obtained, is to be undertaken, obviously the unit time for that activity will increase. For example, at College A, the addition of enough time to bring selection procedures to a satisfactory level will increase the unit time for book acquisition. On the other hand some of the Time Study results showed an unproductive use of time in some areas and an alteration in this situation can result in the lowering of a unit time. In most cases this saves on staffing at the expense of greater cost in some other areas, since the job still has to be done. Two examples are physical processing of books which was very time consuming at College E and is now being done by the book supplier and photocopying at College A which previously involved staff in a long walk to another part of the college, but which will be much quicker when, in the near future, the library acquires its own photocopying machine.

As already mentioned some librarians are also finding it necessary to alter the kind of staff doing a particular job. Thus, at College A, the proportion of clerical time on periodicals has been increased from 1% to 40%, thus bringing it more into line with the practice elsewhere.

Ideally, it should be possible to reach agreement as to the kinds of staff who should undertake most types of library work, at least between clerical and professional staff (see Table 17, Appendix IV).

67. FUTURE STAFF NEEDS: INDIVIDUAL COLLEGES

At College A future staffing needs were calculated for three years ahead, when the library will have moved into a new building. They were based on the Time Study information and took into account all the types of consideration referred to earlier. The results, with notes on how they were obtained, can be found in Table 18.5, Appendix IV.

Attempts were made to do the same for the other four colleges with partial success. Nonetheless, the method is very time consuming and could not be applied to other colleges who have not done Time Studies. It presupposes a librarian working in isolation to produce an individual staffing demand for his own college with very little reference to what is going on elsewhere. The results obtained would, therefore, not be of any use for any other library.

As already indicated, within the constraints of differing buildings, college ethos, etc., all students in all colleges ought to receive the same general standard of library provision. After all, they will be going out to teach in schools all over Britain and therefore, presumably will all need to have the same level of expertise and awareness. It therefore seems reasonable that if provision of a certain type and standard is found beneficial for students in one college, it is also needed elsewhere. Therefore, libraries should not ascertain their needs in isolation from developments in other places. It would be far more useful for colleges if they could calculate their staffing needs with reference to universally applicable standards.

However, we have already noted (Section 1) the unsatisfactoriness of a standard which only takes into account one factor of library business, namely student numbers or bookgrant size. Additionally, although it may be agreed that all colleges should offer the same standard of service, individual circumstances may mean that this has to be provided by different methods in different places. A way of calculating staff needs which ignored all these could be too inflexible to cover many problems of library management.

Since there will always be some colleges which are slow in adopting new methods, providing staff for activities not yet being carried out would be wasteful. On the other hand, if provision and methodology is to develop and change there must always be some colleges which are undertaking activities experimentally which are not yet thought of elsewhere. If staff and facilities for libraries are based on a good average for now without allowing for such variations, then college libraries will stagnate and no developmental work will ever be able to take place.

There is, therefore, a need for a method of calculating staff needs which takes into account variations in circumstances and allows for flexibility while still offering similar standards of provision to all students and staff. In addition, it needs to be based on calculations from statistics which are readily available and to be open to validation as far as possible by reference to quantifiable information available, accepted knowledge of quality and types of service needed and attainable as indicated by the most experienced writers and investigators.

Much of the quantifiable information has become available as a result of this research, although further investigations are needed for validation purposes. The area where quantifiable information is least helpful and opinion is most undecided as to acceptable levels of provision concerns teaching and guidance in library use and the extent to which the library should offer an active rather than a passive service. If we are to take note of the aims and objectives of a college library (see Part I) and the changing climate of opinion concerning student education, we must assume that for the future a positive decision should be made.

Apart from the above reasons there are also sound economic reasons for making adequate staff provision for libraries. The article in LAR 70 (2) stated "Very large capital sums have now been spent on college library provision, and the cost of library staff large enough to exploit the full value of these stocks is comparatively small. It is extremely wasteful to be adding items to stock, to be taking large numbers of periodicals, to be starting new services, e.g. microfilms and interloan of foreign material via the NCL, if because of routine duties, there is no one with time to explain and secure the use of all such materials."

68. A WAY OF CALCULATING LIBRARY STAFF ACCORDING TO NEED

We have noted that the present system of allocating library staff according to student numbers only is unsatisfactory as it ignores many of the other factors which affect staff needs. We have also noted the changes in students' courses which have increased library business and the wider range of materials now stocked by college libraries. Other factors which affect this are opening hours, varying expenditure and the variety of courses offered by colleges.

The formulae which follow (in Sections 69 - 77) offer a means by which librarians and college administrations can calculate the staffing needs of their libraries with reference to the following matters.

1. Changes in spending power, to allow for staff needs according to the number of items purchased. This should also enable a librarian to employ adequate temporary staff to clear processing backlogs or handle the extra work resulting from a non-recurring grant.

2. Changes in student use, as measured by issues, taking into account demands for new services, long opening hours and the advent of audiovisual materials.

3. Increases in stock size

4. Adequate guidance to cater for user requirements.

5. An increase in the bibliographical and display services in most colleges, in order to bring them into line with the best provided elsewhere.

6. The need for proper liaison between the library and the rest of the college.

A librarian should be able to ascertain his reasonable needs, based on his own successes and failures and with constant reference to developments elsewhere, so that all students are equally catered for. The rates suggested should be adequate for all present library needs, assuming staffs are at least as efficient as those we investigated. The formulae have been applied to 17 colleges including some who have not been involved in our research and the results so far suggest that the staffing needs which result are acceptable. (See Section 78). Nonetheless, the situation should be kept constantly under review and adjusted in the light of whatever subsequent developments there may be (see Sections 79-82).

The number of man hours needed must be changed into a number of staff. It is difficult to give a hard figure for the number of hours one person will actually work per annum, as it depends on the official hours worked per week, holiday entitlement, sickness, etc. If the sickness rate is assumed to be about 6% of gross time, which is a commonly accepted rate in industry, then the formula is:

hours per week x 52 - 6% - holiday entitlement.

For example, if hours per week are 35 and holidays including given days are 30 days, (probable for professional staff), the total actual hours per member of staff will be 1492. If hours per week are 38, and holidays amount to 25 days, then they will be 1665 hours. In future most staffs will work a maximum of 37 hours per week. Therefore, allowing a margin for "time out of college" etc. we can calculate staff needed on the assumption that professional staff will actually work, on average 1500 hours and clerical staff, 1550 hours per year. We have used these figures when applying formulae in this report (See Section 78), but librarians may wish to calculate more precise figures, by applying the formula indicated above.

69. THE FORMULAE

The different rates shown in the formulae should be applicable to libraries which meet most nearly the description of conditions applying which accompany each rate. We have endeavoured to include all necessary differences in circumstances but not those which are simply a result of minor variations in practice or personnel. It may occasionally be the case that a library will achieve a faster time than these because of an unusually skilled, fast and efficient worker, but other libraries should not be penalised accordingly, by being expected to acquire such paragons. It is more reasonable to allow the fortunate library to make the slight gain resulting because: a) the assistant will probably leave for promotion purposes in time; b) the figures for all activities are based on library activities which one could hope can be achieved at present, rather than all those which would be beneficial; so the extra time will be put to good use by the library concerned, for the benefit of the college, its students and perhaps for college libraries everywhere, since only such a library will be able to forge ahead and experiment for tomorrow's needs as well as cope with to-day's demands. On the other hand, some libraries may achieve poorer times than these, because of staff, perhaps elderly or inexperienced or just inefficient. In a small staff problems resulting from one difficult personality are bound to be magnified, and obviously the librarian cannot just dismiss his staff in most such cases. This problem cannot altogether be legislated for. It is hoped that by allowing the standard 12½% relaxation allowance, so that staff will no longer need to work at an unreasonable rate to produce the necessary output, and by taking into accounts gaps in staffing and sickness (see Section 5) in calculating time available per year per employee, sufficient account will have been taken of problems arising from induction of new staff and similar unavoidable factors. It is obviously uneconomic to allow time for other types of production loss owing to inefficiency, and it is felt that generally speaking a high level of productivity is already achieved.

70. Formula 1

This first formula is made up of those library activities which involve acquisition of books and other materials. This includes time for acquiring and processing books, audiovisual materials and periodicals, and time for preparing and processing acquisitions and periodical lists, indexes, or current contents information. Our Time Study investigations produced hard, quantitative information concerning time needed for the first mentioned activities of acquiring and processing materials. In one college they also produced hard quantitative figures for time taken to produce a subject index. A separate timing exercise ascertained time taken to produce current contents lists at one other college. In certain cases the processing being done in one or more of these colleges was considered by the librarian to be inadequate, for reasons such as there being too little time spent on Selection and an incomplete catalogue. In contrast, in one college the time was considered excessive, and the activities concerned will not, in future, take so long since part of the processing work is no longer done within the library. At another college a change in the method of ordering BNB cards has slightly reduced the unit time. At many other libraries a regular accessions list is also produced and, therefore, an allocation for this is also needed, where necessary. Time for this has been estimated, but further timing experiments are needed to validate this figure. The ranges which follow, therefore, allow time for acquiring, indexing and acquisition list production, per one hundred items acquired each year. It was found most satisfactory to calculate two periodical issues as being equivalent to one item.

For an explanation of the way the following formulae were calculated see Table 19 Appendix IV.

Formula 1: Rates per 100 items acquired

	Academic	Professional	Clerical
a)	3.8 hrs.	17.0 hrs.	19.5 hrs.
b)	4.2 "	18.8 "	22.2 "
c)	3.6 "	14.8 "	18.9 "
d)	1.8 "	8.4 "	9.7 "

a) is the rate for most college libraries.

b) is the rate for colleges servicing books for Bookamatic or Browne and/or putting in Diver Detection strips, as well as doing all processing involved elsewhere. (There may be some need to adjust proportions here as most of this extra work can be done by clerical staff but because the same proportions of staff have been applied the load is spread in the above figures).

c) is the rate for libraries who send their book processing work outside college.

d) is an emergency rate to deal with very heavy spending over a short period, and where some AV materials can be treated as ephemeral and items, in general, have a short useful life. It assumes only very basic processing especially of audiovisual materials.

The following rates per 100 accessions should be added according to whether the library produces:

		Professional	Clerical
i)	a regular accessions list	.2 hrs.	1.5 hrs.
ii)	a monthly current contents list	.3 hrs.	.3 hrs.
iii)	regular full weekly periodical indexes	4.3 hrs.	4.7 hrs.

71. Formula 2

The activities covered by this formula are those concerning reader services other than those of bibliographic advice and library education, exemplified by the library's issue statistics. It includes the issue and return of items of all types, photocopying, reservations and inter-library loan service, registration of students, and the shelving of books and other materials. Hard quantifiable information concerning the time taken on these items was obtainable from the Time Studies, save in one college where a reservation service was not offered, but a time for such a service has been estimated with reference to those provided elsewhere. The rates below show the range of hours needed per 100 issues according to the conditions prevailing.

Formula 2: Rates per 100 issues

	Academic	Professional	Clerical
a)	.1 hrs.	1.0 hrs.	6.5 hrs.

for the first 450 hundred issues in all libraries with a supervised issue counter, and for all issues in libraries where such a counter is manned by staff for 65 hours or more per week, or where two topographically separate sections of the library are manned. If both factors apply it is necessary to add an additional:

	Academic	Professional	Clerical
		.4	2.1 hrs. per 100
b)	.1	.5	3.9 hrs. per 100

is for the 550 hundreds after the first 450 in all libraries with a supervised issue desk, other than those referred to above, and for all subsequent 100's these same libraries should use rate c).

c)	.1	.7	4.4 hrs. per 100

All libraries with an unsupervised issue desk use rate d)

d)	.1	.6	3.7 hrs. per 100

The following amounts should be added/subtracted where applicable:

i) +.4 clerical hours per 100, where as many or more books need shelving after internal use as there are books issued.

ii) -.4 clerical hours per 100, where about 100 books per week (less in a small library) need shelving after internal use.

Most libraries will probably find that they need to shelve 30-60% as many books from tables as are borrowed, and this is catered for in the normal rates.

iii) +.2 clerical hours per 100 for libraries where slips are filed in transaction number order (Bookamatic, photocharging), as this necessitates a more time consuming reservation system.

iv) Where Reservations and Interloans together amount to more than 3% of issues + .2 professional and + .3 clerical hours for each subsequent 3%

72. Formula 3

There are two activities which are controlled by the libraries'total book stock. These are straightening the whole library and stock editing. Time for straightening one shelf was obtained by a timing experiment and time to complete the whole library by multiplying the result by the number of shelves. As no college is, at present, straightening as often as it would like, in all cases they have been allowed time to complete this task weekly. Stock editing has been estimated, allowing an increase in time for relegation since all the colleges have been adding rapidly to stock in the last few years and little discarding has been needed, but the process will have to be carried out from now on.

Formula 3: Rates per 100 items in stock

	Academic	Professional	Clerical
a)	.1 hours per 100	1.2 hours per 100	2.4 hours per 100
b)	.1 hours per 100	.8 hours per 100	1.5 hours per 100

a) is for most libraries

b) is for a library where a quarter or more of the stock is audiovisual and on closed access, thus requiring no straightening.

73. Formula 4

This formula concerns the provision of advice and bibliographical guidance to students and staff, individually seeking help while in the library and time spent by library staff on teaching, including preparation and follow-up group work, seminars, etc. The amount of advice readers were receiving in the four colleges varied from 8 minutes to 34 minutes per student per year. But even the library with the highest figure finds that insufficient time is given to helping individual users. The time spent on teaching programmes were as follows per student:

A	D	E	G
19 mins. (57 mins to one year only)	10 mins. (100 mins. to a small group)	31 mins.	14 mins.(40 mins. each to 1st. years only)

All these times include about 1½ hours preparation and follow up for every teaching hour, as this is the average needed. This includes 1½ hours per hour for most teaching hours, ½ hour per lecture for those which are repeated to several groups of students and four hours per hour when new courses are being planned. The range of times per student for readers' advice and teaching together was:

A	D	E	G
39 mins.	27 mins.	65 mins.	23 mins. per student

Or, if we consider it another way; those students who actually attended the courses received 63 - about 100 mins. each, those who did not received 8 - 34 mins. each.

It is reasonable to assume that all students should receive at least what the more fortunate are getting. We must also remember that a large amount of this time is being spent on preparation and marking and so the students are receiving less contact time than this. Evidence from College A suggests that the amount of readers' advice being sought and given as a result of manning the Reader's Advice desk for longer hours of the day has already considerably increased their time per student. At College G there is evidence that students feel a need for more guidance than the library is able, at present, to give. (See Part V B Section 3). As in-service training, the number of B.Eds. and work on assignments increase the need will become even greater. The wider range of materials handled also increases the breadth of advice sought by users. The views of the librarian of the colleges investigated, and others can be found in Table 16, Appendix IV. It seems reasonable, therefore, to estimate for a slightly higher rate per student than the best shown here and to apply the same rate per student to all colleges. We recommend:

.625 Academic hours and .625 Professional hours per student/staff.

i.e. 75 mins. per person. In addition, many of the academic staff have come straight from teaching in schools and have had little opportunity to acquire much more than the basic library skills for themselves. As Line, in his exploratory study on *Information requirements of college of education lecturers and school teachers* remarks,

> "... the current information activities of college lecturers must be regarded as very inadequate for the job they have to undertake. It is doubtful if such meagre contact with literature and infrequent participation in formal communication are sufficient to meet the requirements of persons training future generations of teachers."

Other lecturers engaged in research work experience problems of "physical access to material and identification of material required which may be elswhere." They apparently "relied much more heavily on librarians and libraries than" other researchers. Yet " there may be at least a suspicion that in some cases librarians have adopted a passive rather than active role in helping the researcher; they are there if wanted, but they do not always go out of their way to make clear to researchers the services available to them. The issue of regular bulletins or newsletters is not a substitute for a regular, positive personalised service." "Delegation of searching on a systematic basis is almost unheard of in a college of education, again presumably because of lack of assistance" yet "our interviews showed an almost total non-use of bibliographical tools by college of education researchers".

If the picture Line paints is accurate, then there is at least as much need for advice and guidance in the use of the library and bibliographic materials amongst the academic staff as there is amongst the students. Therefore we recommend that the same time per member of staff should apply as is indicated above for students.

In calculating total amounts needed by means of this formula, there is a problem in the increasing number of colleges where there are part-time, term and in-serivce courses in progress. One librarian states that these are "very demanding" and including them at their full-time equivalent rate may be underestimating the amount of personal help they may actually need during an often intensive course. At the moment, in applying the formula, we have only included full-time students. It may be necessary to count each part-timer as one half.(but see Section 80.)

74. Formula 5

Display

The Time Study information provided only a figure for total hours spent on this activity. Further information concerning actual displays produced and for what purposes, was obtained additionally however. Displays would seem to fall under the following categories. Firstly there are those using the library's own materials. These will include displays of new books, displays of particular sections of stock to which the librarian wishes to draw his readers' attention; displays to support teaching courses of the librarian and of the staff of the college, and displays to back up college conferences or other special occasions. Displays of external materials will include special travelling exhibitions, such as those from the V. and A. and publishers' exhibitions of new books for selection and purchase purposes.

Displays to support the teaching work of other college staff, and college conferences on special occasions, will take place presumably as frequently as requested, and in every college area as relevant to fulfil their function. Publishers and travelling exhibitions will need space which is unlikely to be supplied within the library's more normal display area, and a temporary area is probably most suitable for these. If the library has one or more permanent display points, it is necessary that these should be always in use, and it is probably reasonable to suppose that a change of one per fortnight in term time is about the average to be expected.

The other types of display mentioned will occur with variable frequency, and the librarian can only estimate in relation to what has happened in past years, much as he must estimate that his future issue statistics will be closely related to those he has obtained in the past. Of course, he may also have advance information concerning the demands which are going to be made on him in the future. For an example of a typical year's displays at one college see Table 15.1, Appendix IV.

In some colleges the librarian will have access to enough permanent display points to be able to use these for all or most of his special as well as regular display activities.

Formula 5 : Rates per display

	Professional	Clerical
a)	.75 hours	.75 hours.

per fortnight in term time x no. of display points regularly available.

	Professional	Clerical
b)	.5 hours	.5 hours

per fortnight in term time x no. of display points regularly available

	Professional	Clerical
AND	5 hours	5 hours

per special display (one per department or main subject area per year is a possible way of calculating the number here, unless a timetable of displays is already in existence.)

Any library may use rate (a), but it is not recommended for those with less than 5 display points as an unacceptably low figure would result. No library applying rate (b) should claim for more than 5 display points. There is disagreement amongst librarians as to whether display work is chiefly professional or clerical. The proportions suggested are compromises, but individual librarians may wish to vary them.

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Formula 6

75. Formula 6 concerns library publications. These fall into two broad types: (except acquisitions and periodical Current Awareness lists, in Formula 1).

1) Guides to projects, sources and types of materials. These include general library guides, guides to other libraries in the area, guides to special collections such as audiovisual materials for specific groups within the college, such as B.Eds. and post graduates, and also lists of periodicals taken, Selective Dissemination of Information (S.D.I.) etc.

2) Bibliographies which for college purposes will presumably only include material available in the college library, and will be annotated.

The type 1) publication does not need to be rewritten from scratch each year, but can be revised and updated as necessary. However, the production time for an updated version is likely to take as long as for the original. 2) Academic and professional rates are, therefore, provided according to whether the guide is new or a revision, but only one clerical rate is given. For librarians who have not previously been involved with much bibliographic work, have none or few revisions and no past practice of writing new publications each year, our initial figure of one per course is recommended.

Formula 6: Rate per Publication

	Academic	Professional	Clerical
	4 hrs.	1 hr.	15 hrs. per revision
AND	10 hrs.	5 hrs.	15 hrs. per new publication.

76. Formula 7

This formula concerns the library time which originates from formal liaison with the rest of the college and with relevant bodies outside the college. Forward planning, policy making, calculation of estimates, etc. are likely to be connected to membership of committees or councils. Evidence from the Time Study suggests that this work is calculable at a rate of $2\frac{1}{2}$ hours for every hour of actual committee time. Evidence from the librarians suggests that although the length of internal committees is variable on average each one lasts approximately $2\frac{1}{2}$ hours. External committee and conference work is not likely to need so much preparation and follow up work, and the librarian should, therefore, claim the actual hours which he and his staff spend at such functions, with the possible proviso that he should not claim undue time for external meetings.

Formula 7: Rate per Meeting

6.25 hours x number of college committee meetings

2.5 hours x number of external meetings.

Count a one-day meeting as two meetings, a two-day conference as four/five meetings, a week long conference as eight/ten meetings, according to the number of sessions, etc.

77. Formula 8

There remains the day-to-day work of administering and supervising the library: acquiring equipment: dealing with financial matters: staff organisation: personnel work: correspondence: keeping abreast professionally: report reading: and the clerical work emanating from these. It will usually also include an element for practical research to enable the library to keep abreast with modern developments and informal liaison with college staff to enable the library to offer a service which is aware of the changing needs of the college. The Time Study suggested that the total time needed for these activities was around 15% of the total time worked by the whole library staff. The proportion of this time which is academic, professional and clerical will vary slightly according to the make up of that staff, but, in each case, it is only calculable as a proportion of the total needs, the percentage figure used is that found from the Time Study.

As the extent to which the proportions for professional and clerical staff will vary is usually minimal a standard rate has been suggested. All the adjustment is therefore made on the Academic figure. Libraries, however, are advised that the first figure given will usually be satisfactory and if in doubt this should be used. The second figure is for very small staffs, probably those with less than 2½ Academic and Professionals, but is still not always needed. The third figure is only for libraries where the Academic is very heavily involved in bibliographical and teaching programmes. In these cases 35% of their total time will give as much time as would 40% of the usual totals. For this reason, as these activities increase, in future 35% may become a satisfactory figure for most libraries. Nonetheless administrative liaison work may also increase in which case the present average percentage may still be valid.

Formula 8: Rate

Academic	Professional	Clerical
40%		
45%	15%	6%
35%		

78. Applying the Formulae

There follows three full examples of how a college should apply the eight formulae to its own needs. The results obtained for these three colleges and a further fourteen colleges are then given.

Some of these figures are based on estimates, especially those referring to hours on committees. The number of internal committees has been calculated as follows: the committees on which the librarians sit multiplied by the approximate number of times each meets. External committees, conferences, etc. have been estimated by asking staffs to remember how many they had actually attended during 1971/2. Some omissions and miscalculations are therefore probable but these are not likely to be so inaccurate as to affect the calculations for number of staff needed.

These examples should be taken primarily as illustrations of the method, although we believe that they also give accurate pictures of the staff needed at present in the libraries selected, within reasonable tolerance limits, (i.e. they are probably accurate to within 100 hours, overall, either way.)

COLLEGE A

	Academic Hours	Professional Hours	Clerical Hours
F.1. Accessions			
Rate per 100 items acquired = b)	4.2	18.8	22.2
Reason: Bookamatic issue system and Diver detection device.			
Additions - None	-	-	-
F.2. Reader Service			
Rate per 100 items issued =			
for first 450 hundreds a)	.1	1.0	6.5
for next 550 hundreds b)	.1	.5	3.9
for remaining hundreds c)	.1	.7	4.4
Reason: Large (over 1000 hundreds) and supervised issue			
Additions	-	-	.6
Reason: Extra shelving and transaction order filing.			
F.3 Stock			
Rate per 100 items in stock	.1	1.2	2.4
F.4. Advice and Teaching			
Rate per library user	.625	.625	
F.5. Display			
Rate per display point per fortnight a)		.5	.5
Rate per department or special display b)		5.0	5.0
Reason: Less than 5 display points.			
F.6. Publications			
Rate per revision	4.0	1.0	15.0
Rate per new publication	10.0	5.0	15.0
F.7. Committees, Planning, etc.			
Rate per college committee	6.25	6.25	-
Rate per external committee	2.5	2.5	-
F.8. Administration			
Rate per total staff time = b)	40%	15%	6%
Reason - Normal			

COLLEGE A

1. Total Acquisitions [1] = 14390
2. Total Issues = 105611
3. Total Stock [2] = 84388
4. Total Staff and Students = 1700
5. Total Display Points = 2
6. Total Special Displays = 17
7. Total revisions of publications = 19
8. Total new publications = None
9. Total meetings Academic = 44
   Professional = 14
10. Total external meetings
    Academic = 25
    Professional = 1
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	143.9 x 4.2 = 604	143.9 x 18.8 = 2705	143.9 x 22.2 = 3194
2.	45 + 55+(56.1x.1) = 106	450+275+ (56.1x.7)= 764	2925 + 2145) +(56.1 x 4.4) = 5951 +(1056.1 x .6)
3.	843.88 x .1 = 84	843.88 x 1.2 = 1013	843.88 x 2.4 = 2025
4.	1700 x .625 = 1062	1700 x .625 = 1062	
5.		2 x 17 x .5= 17	2 x 17 x .5 = 17
5.		17 x 5 = 85	17 x 5 = 85
6.	19 x 4 = 76	19 x 1 = 19	19 x 15 = 285
6.	-	-	-
7.	44 x 6.25 = 275	14 x 6.25 = 87	-
7.	25 x 2.5 = 63	1 x 2.5 = 3	-
Sub Total	2270	5755	11557
8. + %	40% 1513	15% 1016	6% 737
Total.	3783	6771	12294
Staff needed	$2\frac{1}{3}$	$4\frac{1}{4}$	$7\frac{3}{4}$
Present staff	2	3	5

COLLEGE E

	Academic Hours	Professional Hours	Clerical Hours
F.1. Accessions			
Rate per 100 items acquired = d)	3.6	14.8	18.9
Reason: Processing done outside college			
Additions: (iii)	-	4.3	4.7
Reason: Periodical indexing			
F.2 Reader Service			
Rate per 100 items issued = d)	.1	.6	3.7
Reason: Unsupervised issue system			
Additions: (ii)			Minus .4
Reason: Very little internal use shelving.			
F.3 Stock			
Rate per 100 items in stock	1.	.8	1.5
Reason: Closed access audiovisual collection			
F.4. Advice and Teaching			
Rate per library user	.625	.625	
F.5. Display			
Rate per display point per fortnight a)		.5	.5
Rate per department or special display b)		5.0	5.0
Reason: Less than 5 display points			
F.6. Publications			
Rate per revision	4.0	1.0	15.0
Rate per new publication	10.0	5.0	15.0
F.7. Committees, Planning, etc.			
Rate per college committee	6.25	6.25	-
Rate per external committee	2.5	2.5	-
F.8. Administration			
Rate per total staff time = c)	35%	15%	6%

Reason: Over 1200 Academic but Academic + Professional = less than 7,000 hours

COLLEGE E

1. Total Acquisitions[1] = 8549
2. Total Issues[2] = 51000
3. Total Stock = 44406
4. Total Staff and Students = 980
5. Total Display Points = 2
6. Total Special Displays = 55

7. Total revisions of publications = 30
8. Total new publications = 10
9. Total meetings Academic = 75
   Professional = 25
10. Total external meetings
    Academic = 20
    Professional = 63
11. $\frac{\text{Total term weeks}}{2} = 17$

[1] includes all books, all audiovisuals and half periodical issues.
[2] includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	85.5 x 3.6 = 308	85.5 x 19.7 = 1633	85.5 x 23.6 = 2018
2.	510 x .1 = 51	510 x .6 = 306	510 x 3.3 = 1683
3.	444 x .1 = 44	444 x .8 = 355	444 x 1.5 = 666
4.	980 x .625 = 612	980 x .625 = 612	
5.		17 x 2 x .5 = 17	17 x 2 x .5 = 17
5.		55 x 5 = 275	55 x 5 = 275
6.	30 x 4 = 120	30 x 1 = 30	30 x 15 = 450
6.	10 x 10 = 100	10 x 5 = 50	10 x 15 = 150
7.	75 x 6.25 = 469	25 x 6.25 = 156	
7.	20 x 2.5 = 50	63 x 2.5 = 157	
Sub Total	1754	3591	5322
8. + %	35% 944	15% 643	6% 340
Total	2698	4225	5662
Staff needed	1¾	2½	3½
Present staff	1	2	3

COLLEGE X

		Academic Hours	Professional Hours	Clerical Hours
F.1.	Accessions			
	Rate per 100 items acquired = a)	3.8	17.0	19.5
	Reason: Normal			
	Additions: None	-	-	-
F.2.	Reader Service			
	Rate per 100 items issued = a)	.1	1.0	6.5
	Reason: Under 45 000 issues per year			
	Additions: None			
F.3.	Stock			
	Rate per 100 items in stock	.1	1.2	2.4
	Reason: Normal			
F.4.	Advice and Teaching			
	Rate per library user	.625	.625	
F.5.	Display			
	Rate per display point per fortnight a)		.5	.5
	Rate per department or special display b)		5.0	5.0
	Reason: Less than 5 display points.			
F.6.	Publications			
	Rate per revision	4.0	1.0	15.0
	Rate per new publication	10.0	5.0	15.0
F.7.	Committees, Planning, etc.			
	Rate per college committee	6.25	6.25	-
	Rate per external committee	2.5	2.5	-
F.8.	Administration			
	Rate per total staff time = b)	40%	15%	6%

COLLEGE X

1. Total Acquisitions [1.] = 6300
2. Total Issues = 25600
3. Total Stock [2.] = 35000
4. Total Staff and Students = 600
5. Total Display Points = 1
6. Total Special Displays = 11
7. Total revisions of publications = 1
8. Total new publications = 11
9. Total meetings Academic = 14
10. Total external meetings Academic = 4
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	63 x 3.8 = 239	63 x 17 = 1071	63 x 19.5 = 1228
2.	256 x .1 = 26	256 x 1 = 256	256 x 6.5 = 1664
3.	350 x .1 = 35	350 x 1.2 = 420	350 x 2.4 = 840
4.	600 x .625 = 375	600 x .625 = 375	
5.		17 x .5 = 9	17 x .5 = 9
5.		11 x 5 = 55	11 x 5 = 55
6.	1 x 4 = 4	1 x 1 = 1	1 x 15 = 15
6.	11 x 10 = 110	11 x 5 = 55	11 x 15 = 165
7.	14 x 6.25 = 88		
7.	4 x 2.5 = 10		
Sub Total	887	2242	3976
8. + %	40% 591	15% 396	6% 254
Total	1478	2638	4230
Staff needed	1	2	2½
Present staff	1	1	1½

COLLEGE B

1. Total Acquisitions [1.] = 12000
2. Total Issues = 24000
3. Total Stock [2.] = 56000
4. Total Staff and Students = 1200
5. Total Display Points = 2
6. Total Special Displays = 17
7. Total revisions of publications = 0
8. Total new publications = 17
9. Total meetings ?
10. Total external meetings ?
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	120 x 4.2 = 504	120 x 18.8 = 225.6	120 x 22.2 = 2664
2.	240 x .1 = 24	240 x 1.8 = 432	240 x 5.5 = 1320
3.	560 x .1 = 56	560 x 1.2 = 672	560 x 2.4 = 1344
4.	1200 x .625 = 750	1200 x .625 = 750	
5.		34 x .5 = 17	34 x .5 = 17
5.		17 x 5 = 85	17 x 5 = 85
6.			
6.	17 x 10 = 170	17 x 5 = 85	17 x 15 = 255
7.	= 350 ?	= 50 ?	
7.			
Sub Total	1854	4347	5685
8. + %	40%	15%	6%
Total	3090	5114	6048
Staff needed	2	3¼	4
Present staff	2	3	3½

COLLEGE C

1. Total Acquisitions[1] = 6000
2. Total Issues = 50000
3. Total Stock[2] = 60000
4. Total Staff and Students = 1050
5. Total Display points = 1 ?
6. Total Special Displays = 13
7. Total revisions of publications = 3
8. Total new publications = 13
9. Total meetings = ?
10. Total external meetings = ?
11. $\frac{\text{Total term weeks}}{2} = 17$

[1] includes all books, audiovisuals and half periodical issues.

[2] includes audiovisuals and periodical titles.

	Academic		Professional		Clerical	
1.	60 x 4.2 =	252	60 x 19 =	1140	60 x 23.7 =	1422
2.	500 x .1 =	50	500 x 1 =	500	500 x 6.5 =	3250
3.	600 x .1 =	60	600 x 1.2 =	720	600 x 2.4 =	1440
4.	1050 x .625 =	656	1050 x .625 =	625		
5.			17 x .5 =	9 ?	17 x .5 =	9 ?
5.			13 x 5 =	65	13 x 5 =	65
6.	3 x 4 =	12	3 x 1 =	3	3 x 15 =	45
6.	13 x 10 =	130	13 x 5 =	65	13 x 15 =	195
7.	150 hrs.est.	150 ?	50 hrs. est.	50 ?		
7.						
Sub Total		1310		3208		6426
8. + 40%		873	15%	566	6%	410
Total		2183		3774		6836
Staff needed		1½		2½		4¼
Present staff		1		1		4

COLLEGE D.

1. Total Acquisitions [1] = 9690
2. Total Issues = 80280
3. Total Stock [2] = 60340
4. Total Staff and Students = 930
5. Total Display Points = 3
6. Total Special Displays = 18

7. Total revisions of publications = 4
8. Total new publications = 18
9. Total meetings Academic = 5
   Professional = 10
10. Total external meetings
   Academic = 9
   Professional = -
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	96.9 x 1.8 = 174	96.9 x 8.6 = 833	96.9 x 11.2 = 1085
2.	802.8 x .1 = 80	802.8 x 1.0 = 803	802.8 x 6.5 = 5218
3.	603.4 x .1 = 60	603.4 x 1.2 = 724	603.4 x 2.4 = 1448
4.	930 x .625 = 581	930 x .625 = 581	
5.		3 x .5 = 2	3 x .5 = 2
5.		18 x 5 = 90	18 x 5 = 90
6.	4 x 4 = 16	4 x 1 = 4	4 x 15 = 60
6.	18 x 10 = 180	18 x 5 = 90	18 x 15 = 270
7.	5 x 6.25 = 31	10 x 6.25 = 63	
7.	9 x 2.5 = 23		
Sub Total	1145	3190	8173
8. + %	45% 937	15% 564	6% 522
Total	2082	3754	8695
Staff needed	1⅓	2⅓	5
Present Staff	0	3	3½

COLLEGE F

1 Total Acquisitions [1] = 7500
2. Total Issues = 62000
3. Total Stock [2] = 75000
4. Total Staff and Students = 825
5. Total Display Points = 2
6. Total Special Displays = 14
7. Total revisions of publications =
8. Total new publications = 14
9. Total meetings
10. Total external meetings
11. $\frac{\text{Total term weeks}}{2}$ = 17

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	75 x 4.2 = 315	75 x 23.1 = 1732	75 x 26.9 = 2017
2.	(170 x .1)+ 45 = 62	(170 x.5) + 450= 535	(170 x 3.9)+ 2925= 3588
3.	750 x .1 = 75	750 x 1.2 = 900	750 x 2.4 = 1800
4.	825 x .625 = 516	825 x .625 = 516	
5.		34 x .5 = 17	34 x .5 = 17
5.		14 x 5 = 70	14 x 5 = 70
6.			
6.	14 x 10 = 140	14 x 5 = 70	14 x 15 = 210
7.	= 150 ?	= 50 ?	
7.			
Sub Total	1258	3890	7702
8. + %	40%	15%	6%
Total	2097	4576	8194
Staff needed	1$\frac{1}{3}$	3	5
Present staff	1	3	3

COLLEGE G

1. Total Acquisitions [1] = 5892
2. Total Issues = 42610
3. Total Stock [2] = 41512
4. Total Staff and Students = 790
5. Total Display Points = 1
6. Total Special Displays = 10
7. Total revisions of publications = 3
8. Total new publications = 10
9. Total meetings Academic = 27
10. Total external meetings Academic = 35
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	59 x 3.8 = 224	59 x 17.3 = 1021	59 x 19.8 = 1118
2.	426 x .1 = 43	426 x 1.0 = 426	426 x 6.5 = 2769
3.	415 x .1 = 42	415 x 1.2 = 498	415 x 2.4 = 996
4.	790 x .625 = 494	790 x .625 = 494	
5.		17 x .5 = 9	17 x .5 = 9
5.		10 x 5 = 50	10 x 5 = 50
6.	3 x 4 = 12	3 x 1 = 3	3 x 15 = 45
6.	10 x 10 = 100	10 x 5 = 50	10 x 15 = 150
7.	27 x 6.25 = 169		
7.	35 x 2.5 = 88		
Sub Total	1172	2551	5137
8. + %	40% 781	15% 450	6% 328
Total	1953	3001	5465
Staff needed	1¼	2	3½
Present staff	1	1	3

COLLEGE H

1. Total Acquisitions [1] = 5500
2. Total Issues =19200
3. Total Stock [2] =22500
4. Total Staff and Students = 500
5. Total Display Points = 1
6. Total Special Displays = 9

7. Total revisions of publications =
8. Total new publications = 9
9. Total Meetings = ?
10. Total external Meetings = ?
11. $\frac{\text{Total term weeks}}{2} = 17$

[1] includes all books, all audiovisuals and half periodical issues.
[2] includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	55 x 3.8 = 209	55 x 17 = 935	55 x 19.5 = 1072
2.	192 x .1 = 19	192 x .6 = 115	192 x 3.7 = 710
3.	225 x .1 = 23	225 x 1.2 = 270	225 x 2.4 = 540
4.	500 x .625 = 312	500 x .625 = 312	
5.		17 x .5 = 9	17 x .5 = 9
5.		9 x 5 = 45	9 x 5 = 45
6.			
6.	9 x 10 = 90	9 x 5 = 45	9 x 15 = 135
7.	= 100 ?		
7.			
Sub Total	926	1731	2511
8. + %	40%	15%	6%
Total	1543	2036	2671
Staff needed	1	1⅓	1⅓
Present staff	⅓	⅔	⅓

COLLEGE R

1. Total Acquisitions[1] = 10C38
2. Total Issues = 69236
3. Total Stock[2] = 70000
4. Total Staff and Students = 930
5. Total Display Points = 3
6. Total Special Displays = 16 (depts.)
7. Total revisions of publications = 3
8. Total new publications (depts.) = 16
9. Total meetings = 70
10. Total External Meetings = 20
11. $\frac{\text{Total term weeks}}{2}$ = 17

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic		Professional		Clerical	
1.	100 x 3.6	= 360	100 x 14.8	= 1480	100 x 18.9	= 1860
2.	692 x .1	= 69	242 x .5 + 450	= 561	242 x 3.9 + 2925	= 3869
3.	700 x .1	= 70	700 x 1.2	= 840	700 x 2.4	= 1680
4.	930 x .625	= 581	930 x .625	= 581		
5.			17 x 3 x .5	= 9	17 x 3 x .5	= 9
5.			16 x 5	= 80	16 x 5	= 8
6.	3 x 4	= 12	3 x 1	= 3	3 x 15	= 45
6.	16 x 10	= 160	16 x 5	= 80	16 x 15	= 2 0
7.	70 x 6.25	= 437				
7.	20 x 2.5	= 50				
Sub Total		1739		3644		7783
8. + %	40%		15%		6%	
Total		2898		4287		8283
Staff needed		2		2¾		5½
Present Staff		2		1		3 1/6

COLLEGE S

1. Total Acquisitions [1.] = 3000 ?
2. Total Issues = 15000
3. Total Stock [2] = 18000
4. Total Staff and Students = 370
5. Total Display Points = 1
6. Total Special Displays = 6
7. Total revisions of publications =
8. Total new publications = 6
9. Total Meetings = ?
10. Total external Meetings = ?
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	30 x 3.8 = 114	30 x 17 = 510	30 x 19.5 = 585
2.	150 x .1 = 15	150 x 1.4 = 210	150 x 8.6 = 1290
3.	180 x .1 = 18	180 x 1.2 = 216	180 x 2.4 = 432
4.	370 x .625 = 231	370 x .625 = 231	
5.		17 x .5 = 9	17 x .5 = 9
5.		6 x 5 = 30	6 x 5 = 30
6.			
6.	6 x 10 = 60	6 x 5 = 30	6 x 15 = 90
7.			
7.			
Sub Total	438	1236	2436
8. + %	40%	15%	6%
Total	730	1454	2591
Staff needed	½	1	$1\frac{2}{3}$
Present staff	1	0	½

COLLEGE T

1. Total Acquisitions [1.] = 5283
2. Total Issues =26300
3. Total Stock [2.] =42000
4. Total Staff and Students = 700
5. Total Display Points = 1
6. Total Special Displays = 13

7. Total revisions of publications = 2
8. Total new publications = 13
9. Total Meetings Academic = 17
Professional = 9
10. Total external Meetings
Academic = 10
Professional = 8
11. $\frac{\text{Total term weeks}}{2}$ = 17

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	53 x 3.8 = 201	53 x 17.2 = 911	53 x 21 = 1113
2.	263 x .1 = 26	263 x 1.0 = 263	263 x 6.5 = 1709
3.	420 x .1 = 42	420 x 1.2 = 504	420 x 2.4 = 1008
4.	700 x .625 = 437	700 x .625 = 437	
5.		17 x .5 = 9	17 x .5 = 9
5.		13 x 5 = 65	13 x 5 = 65
6.	2 x 4 = 8	2 x 1 = 2	2 x 15 = 30
6.	13 x 10 = 130	13 x 5 = 65	13 x 15 = 195
7.	17 x 6.25 = 106	9 x 6.25 = 56	
7.	10 x 2.5 = [illegible]	8 x 2.5 = 20	
Sub Total	975	2332	4129
8. + %	40% 650	15% 411	6% 264
Total	1625	2743	4393
Staff needed	1	1$\frac{3}{4}$	3
Present staff	1	1	2$\frac{1}{2}$

COLLEGE U

1. Total Acquisitions[1] = 11349
2. Total Issues = 48604
3. Total Stock [2] = 53000
4. Total Staff and Students = 870
5. Total Display Points = 8
6. Total Special Displays =
7. Total revisions of publications = 1
8. Total new publications = 6
9. Total Meetings = 15
10. Total External Meetings = 13
11. $\frac{\text{Total term weeks}}{2}$ = 17

[1]. includes all books, all audiovisuals and half periodical issues.
[2]. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	114 x 3.8 = 433	114 x 17.2 = 1961	114 x 21 = 2394
2.	45 + 36 x .1 = 49	450+36 x .5 = 468	2925+36 x 3.9 = 3065
3.	530 x .1 = 53	530 x 1.2 = 636	530 x 2.4 = 1272
4.	870 x .625 = 544	870 x .625 = 544	
5.		17 x 8 x .75 = 102	17 x 8 x .75= 102
5.			
6.	1 x 4 = 4	1 x 1 = 1	1 x 15 = 15
6.	6 x 10 = 60	6 x 5 = 30	6 x 15 = 90
7.	15 x 6.25 = 94		
7.	13 x 2.5 = 32		
Sub Total	1269	3742	6938
8. + %	45% 1038	15% 660	6% 443
Total	2307	4402	7381
Staff needed	1½	3	4¾
Present staff	1	2	2

COLLEGE V

1. Total Acquisitions [1] = 11161
2. Total Issues = 76690
3. Total Stock [2] = 65000
4. Total Staff and Students = 1500
5. Total Display Points = 3
6. Total Special Displays = 15
7. Total revisions of publications = 3
8. Total new publications = 15
9. Total Meetings = 4
10. Total External Meetings = 8
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	111.6 x 4.2 = 469	111.6 x 19 = 2120	111.6 x 23.7 = 2645
2.	766.9 x .1 = 77	766.9 x 1 = 767	766.9 x 6.5 = 4958
3.	650 x .1 = 65	600 x 1.2 = 780	600 x 2.4 = 1560
4.	1500 x .625 = 938	1500 x .625 = 938	
5.		3 x 17 x.5 = 25	3 x 17 x .5 = 25
5.		15 x 5 = 75	15 x 5 = 75
6.	3 x 4 = 12	3 x 1 = 3	3 x 15 = 45
6.	15 x 10 = 150	15 x 5 = 75	15 x 15 = 225
7.	4 x 6.25 = 25		
7.	8 x 2.5 = 20		
Sub Total	1756	4783	9535
8. + %	45% 1437	+ 15% 844	6% 608
Total	3193	5627	10141
Staff needed	2	$3\frac{2}{3}$	$6\frac{1}{2}$
Present staff	2	1	$5\frac{1}{2}$

The percentage inaccuracy applying to each round in the college and the number of returns on which the weighting was carried out is indicated in Table 3 in Appendix V.A.

At Padgate a slightly different check was used. Here students visiting the library for the first time during the week were counted, with the help of student volunteers, and these results were compared with the number of students who said, on the diaries, that they made at least one visit. The second round indicated exactly the same proportion as that revealed by this check. Therefore the same weighting system was used as applied elsewhere.

In only two colleges was weighting of any other sort carried out. One of these was Didsbury, where problems resulting from the fact that two separate groups of students were investigated at different times have already been referred to. The diary results were checked against the issue figures and found to be inaccurate, but only by a slightly larger percentage than they tended to be elsewhere. It had been expected that they would be very much more inaccurate since we know non-users could not have been included in the sample. The issue figures for the week of the diary were also compared with the issue figures for the week of the questionnaire and found to be very much lower. Therefore, in order to make the period of the diary comparable with the period of the questionnaire, the diary figures were increased by a sampling fraction obtained from the two issue figures. The exact differences involved are indicated in Table 3 in Appendix V.A. There were only 85 diary replies as against 160 questionnaire replies, therefore it was also necessary to multiply the diary results by $\frac{160}{85}$ to make them equivalent in number to the questionnaire forms. It cannot, of course, be certain that these measures have made these two survey parts equivalent, and therefore use of other libraries compared with use of the college library at Didsbury cannot be accepted with the same certainty as it can be elsewhere.

The other college where different weighting was used was Sedgley Park. Here a remarkable response rate of 100% was obtained from the second and fourth year, a slightly lower response rate was obtained from the first year and a very low rate indeed of 38% from the third year who were out on teaching practice. The forms for this college were not analysed separately in their first and second rounds. It was found that the teaching practice students had made far less use of the college library than the other students, but because so few had responded they did not reflect this lower use adequately in the total picture. By weighting the first and third year rounds to cover those students who did not respond in the same way as the second round figures were weighted for the other college libraries, it was possible to make these years fulfil their right proportion in the total. The sample had ceased to be correctly stratified as a result of the imbalance in the replies and this was corrected by weighting.

Obviously some inaccuracy remains in the figures but it was not considered possible by weighting to get rid of the inaccuracy caused by the 'rosy glow' factor, and we cannot be sure that the inaccuracies found in "books borrowed" apply at a proportionately similar rate to "time spent." Common sense would suggest that people are more likely to be inaccurate in remembering how long they spent doing something than

COLLEGE W

1. Total Acquisitions [1] = 7200
2. Total Issues = 78000
3. Total Stock [2] = 80000
4. Total Staff and Students = 1400
5. Total Display Points = 5
6. Total Special Displays =
7. Total revisions of publications =
8. Total new publications = 12
9. Total Meetings = 18
10. Total External Meetings
    Academic = 9
    Professional = 12
11. $\frac{\text{Total term weeks}}{2} = 17$

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	72 x 3.8 = 274	72 x 17 = 1224	72 x 19.5 = 1404
2.	780 x .1 = 78	780 x 1 = 780	780 x 6.5 = 5070
3.	800 x .1 = 80	800 x 1.2 = 960	800 x 2.4 = 1920
4.	1400 x .625 = 875	1400 x .625 = 875	
5.		17 x .5 x .75 = 64	17 x 5 x .75 = 64
5.			
6.			
6.	12 x 10 = 120	12 x 5 = 60	12 x 15 = 180
7.	18 x 6.25 = 112		
7.	9 x 2.5 = 22	12 x 2.5 = 30	
Sub Total	1561	3993	8638
8. + %	45% 1277	15% 210	6% 551
Total	2838	4203	9189
Staff needed	2	3	5¾
Present staff	1	4	5

COLLEGE Y

1. Total Acquisitions [1] = 10528
2. Total Issues = 63627
3. Total Stock [2] = 80000 ?
4. Total Staff and Students = 2184
5. Total Display Points = 1 ?
6. Total Special Displays = 17
7. Total revisions of publications = 2
8. Total new publications = 17
9. Total Meetings = 31
10. Total External Meetings = 18
11. $\frac{\text{Total term weeks}}{2}$ = 17

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	105.3 x 4.2 = 442	105.3 x 19 = 2000	105.3 x 23.7 = 2496
2.	636.3 x .1 = 64	636.3 x 1 = 636	636.3 x 6.5 = 4136
3.	800 x .1 = 80	800 x 1.2 = 960	800 x 2.4 = 1940
4.	2184 x .625 = 1365	2184 x .625 = 1365	
5.		1 x 17 x 5= 9	
5.		17 x 5 = 85	1 x 17 x.5 = 9
6.	2 x 4 = 8	2 x 1 = 2	17 x 5 = 85
6.	17 x 10 = 170	17 x 5 = 85	2 x 15 = 30
7.	31 x 6.25 = 194		17 x 15 = 255
7.	18 x 2.5 = 45		
Sub Total	2368	5142	8951
8. ÷ % 40%	1579	907	571
Total	3947	6049	9522
Staff needed	2½	4	6
Present staff	1	2	6

COLLEGE Z

1. Total Acquisitions [1.] = 5500
2. Total Issues = 24215
3. Total Stock [2.] = 32000
4. Total Staff and Students = 770
5. Total Display Points = 2
6. Total Special Displays = 14
7. Total revisions of publications = 1
8. Total new publications = 14
9. Total Meetings = 6
10. Total External Meetings = 15
11. $\frac{\text{Total term weeks}}{2}$ = 17

1. includes all books, all audiovisuals and half periodical issues.
2. includes audiovisuals and periodical titles.

	Academic	Professional	Clerical
1.	55 x 4.2 = 231	55 x 18.8 = 1034	55 x 22.2 = 1221
2.	242 x .1 = 24	242 x .6 = 145	242 x 3.7 = 895
3.	320 x .1 = 32	320 x 1.2 = 384	320 x 2.4 = 768
4.	770 x .625 = 481	770 x .625 = 481	
5.		34 x .5 - 17	34 x .5 = 17
5.		14 x 5 = 70	14 x 5 = 70
6.	1 x 4 = 4	1 x 1 = 1	1 x 15 = 15
6.	14 x 10 = 140	14 x 5 = 70	14 x 15 = 210
7.	6 x 6.25 = 38		
7.	15 x 2.5 = 38		
Sub Total	988	2202	3196
8. + %	40% 659	15% 389	6% 204
Total	1647	2591	3400
Staff needed	1	$1\frac{1}{2}$	2
Present staff	0	1	2

79. Further considerations

The formulae have been applied to existing situations in the libraries concerned in such a way as to provide the necessary minimum staff each college needs at the present time. By necessary minimum staff is meant the number of staff needed to acquire, prepare, process and issue all the materials which the library needs and has funds for at the moment, and which readers wish to borrow; to keep the library in such good order as to allow maximum efficiency of internal and external use by readers; and to give advice to readers concerning the library stock and services. The formulae also allow adequate staffing to enable the library to offer basic displays and bibliographical services in support of all areas of college work. Lastly, the concept of necessary minimum staff covers the usual administrative needs of this type of library.

It should not be assumed, however, that these are the only considerations to be included in a basis for staffing. Other factors are no less important, but, so far, no specific time allowances have been made for them. These include sabbatical leave, staff training, trainee posts and parity of status between academic and professional staff. It is not unreasonable to expect that if the tutor-librarian is a full member of the academic staff, he should be eligible for sabbatical leave on the same basis as his colleagues. The recognition of the need for in-service training opportunities for serving teachers may be taken as a precedent for giving the same opportunities to professional librarians whose jobs, like those of the teachers are likely to change and develop as libraries keep pace with new techniques and advanced technology. Clerical staff also need to receive some kind of continuing training either within the library or by attending library assistant's courses at local technical colleges. Where training opportunities of this regular kind are made, they should not be at the expense of the staff left on duty. The hours lost to work should be made up by part-time assistance. In addition, there is an increasing need for the provision of trainee posts in libraries of all kinds for young people who would benefit from a wide variety of work, including some semi-professional activities, before going to library school.

In the course of this research, it became clear that there are many library tasks which are not easily designated to a particular category of staff. Where tasks might easily be as well done by professional as by academic librarians, there is a strong case for saying that all staff in existing professional grades should receive academic status. This would enable subject specialisation among library staff and liaison between such subject specialists and the teaching staff to take place on the level necessary for the satisfactory selection of materials, and for the bibliographic and educational work of the library.

These considerations are all aimed at improving the efficiency of staff and their ability to absorb new ideas and understand the wider needs of the college. They should not be regarded as using time from ordinary work, but as making for a greater level of efficiency on one hand and job satisfaction on the other, which in turn will bring their own economies and improvements.

80. Future variations in the provision of materials and services.

Apart from the addition of the above factors which we hope will soon be recognised in assessments of staffing, there are various other ways in which the situation may alter in the future and for which adjustments to the formulae may be required. The staffing assessments resulting from the formulae should not be considered necessarily adequate for future needs. Developments may alter needs in either direction. The most likely change will be in the amount of actual work input which a library receives, e.g. the numbers of items acquired and issued and the number of readers in the college community may well fluctuate from year to year. Such alterations can be taken for granted since the librarian is required to feed into the relevant parts of formulae 1, 2, 3 and 4 the actual numbers of acquisitions, issues, stock and reader population obtaining at the time. Increases or decreases in workloads in these areas will automatically, therefore, affect the results obtained. For formula 4, a move towards mainly in-service courses or other part-time or short-term courses and increases in part-time staff would create difficulties in calculating the number of readers in the population. Since it may well be that a group of part-timers actually make as heavy demands on the library as the same number of full-time students, it would probably be unsatisfactory to count part-timers as full-time equivalents in the usual way. Further investigation and discussion are required before a satisfactory method is evolved.

Formulae 5 and 6 have been designed to enable the many libraries which so far have been unable to offer much in the way of an organised regular service of displays and bibliographies to now begin to do so. The method suggested by the formulae, which allow them to calculate the amount of time needed by reference to the number of subject departments in college, is a very rough and ready measure and is only intended as a starting point. As a library develops this service, the specific needs of the college will become evident and it should be possible to assess how many bibliographies are likely to be needed and the extent to which displays are welcomed in other parts of the college. The librarian should then be able to calculate an actual number of each needed in one year and plan a realistic programme accordingly instead of using the arbitrary figures of the formulae. An example of how such a programme can develop can be seen by the application of formulae 5 and 6 at College E. (See Section 78.) This is the librarian's actual programming of displays and bibliographies for the year 1971-72, details of which are given in Appendix IV Table 15.1.

There are various other additions to formulae, such as rates for periodical indexing, which a librarian will have to consider on its merits. There are many cases where although there is a need for it, periodical indexing has not been offered because there has been no time for it. This should no longer be an adequate reason for failure to provide a necessary service. On the other hand there may be no need for such a service. There may well be in future a need for further additions to the formulae for completely new services which are at present unknown to us.

81. Future developments within the colleges

Within the next few years there are likely to be radical changes in colleges of education. Two such are already noticeable in some colleges; the transfer of emphasis from teaching centred to learning centred institutions and more inter-disciplinary studies which have been referred to throughout this report. Such changes mean that examinations become less important, work during the year is more so and students are being encouraged to work for longer periods on subjects they themselves have chosen, necessitating greater independence in their search for and use of study materials.

Such developments, if continued, could involve increases in the acquisition and use of materials of all types; greater internal use and, therefore, pressure on accommodation and short loan systems; greater use of interloan services and of journals and audiovisual materials instead of, as well as in addition to, books. Education in library use and readers' advisory work will become all the more vital if the changes of the future, already referred to in Part I. Aims and Objectives, are as fundamental and far-reaching as writers like A. Toffler* would have us believe. Libraries as aids to learning, instruments of education, and sources of information will have to be

* A. Toffler "Future Shock" Pan 1973.

prepared and prepare others for a dynamic environment. More intensive use than usual of interloan services can already be seen at College B and an additional time rate has been calculated for use where the number of interloans amounts to a larger than usual proportion of the overall number of issues. Advanced variable loan policies, already in operation at Lancaster university library, are now being considered by some college librarians, the greater time required being off-set by greater efficiency of use. It may also be appropriate to introduce such technological innovations as Telex, computer charging systems and computer cataloguing into the college libraries in the near future. Such advances would affect the rate for particular tasks and further research would be necessary to establish more appropriate rates and adjust the formulae.

82. The 'James' report and after

Alterations to the character of colleges of education mooted in the James report and crystallised in the subsequent White Paper, Education: a framework for expansion, are bound to affect the use made of their libraries. Most of the likely changes have already been considered. Part-time and in-service students will increase (See Section 79); the range of subjects studied will broaden as students not necessarily committed to a teaching career enter some colleges and, with the inception of Dip.HE and CNAA degree courses and a probable increase in Postgraduate students, a greater proportion of the student body will be undertaking in-depth studies. This could put an extra strain on the services of a college library which has no good local public or university library to rely on. Interlibrary cooperation will need to play a greater part (See Introduction), but libraries themselves will always have to provide a large part of the students needs from their own stock. (See Part II, Section 25 and Part V A Section 8). It will be increasingly imperative to staff the library with people of sufficient calibre to enable subject specialisation to take place and thus improve stock selection, stock editing and library education to levels appropriate for degree courses. Further investigations may well prove the need for more Academic staff time to be spent on these aspects of library work than is given at present by formulae 1, 3 and 4.

We believe, however, that given continuous monitoring to take account of changes as they occur, the assessment of staffing needs given here will be relevant, however colleges of education may change in the future. They will also be of interest to other small and medium-sized institutions of further and higher education.

References

Department of Education & Science. Second report of the Committee on non-teaching staff in maintained colleges of education. DES, March 1968. (Odgers Report).

Department of Education & Science. College letters:
6/69 Voluntary College Estimates DES 1969
1/71 Voluntary College Estimates DES 1971.

Association of Teachers in Colleges and Departments of Education and the Libary Association. College of education libraries; recommended standards for their development. ATCDE/LA, 1967.

Library Association, NUCM Libraries committee. Colleges of Education sub-committee. Staffing in College of Education Libraries. Library Association Record 72 (2) February 1970.

Smith G.C.K. and Schofield J.L. Administrative Effectiveness: Times and costs of library operations. Journal of Librarianship. Vol.3.No.4 Oct. 1971.

Burkhalter B.R. Case Studies in Systems Analysis of a University Library. Scarecrow Press, 1968.

Dougherty R.M. & Heinritz F.J. Scientific Management of library operations. Scarecrow Press, 1966.

Graves, K. and Lippiatt, E.C. Survey of the County Library Service. Management Services Unit. Hertfordshire County Council 1968.

Line B.M., Brittain J.M. and Cranmer F.A. INFROSS Research Report No. 3. Information Requirements of College of Education Lecturers and Schoolteachers. Bath University Library, 1971.

PART V A. LIBRARY USE BY STAFF AND STUDENTS AT COLLEGES OF EDUCATION

1. Introduction

One of the chief reasons given for a need for increased library staffs is the increased use which college of education libraries have been receiving, particularly since the inception of B.Ed. courses. This has also resulted in increased pressure on book stocks. Yet, even if funds were available, staff have not the time to increase purchases to the level which is needed. It is useful, therefore, to have some idea of levels of college library use and what type of use this is most likely to be, while at the same time investigating how far other libraries are providing a useful service to college communities. This last information can give useful guidance concerning the extent to which increased demands can be satisfied by other libraries and the extent to which the college library must provide for them itself and aim at self sufficiency.

The investigation is related to our Second Objective, Part 1 Section 12.3, i.e. "the provision of space" in so far as it provides information on library use problems; 12.4 and 5 concerning "loan periods and issues" as it gives information on number of books borrowed per week by students and staff, 12.8 on opening hours, but especially Section 13, i.e."the library as link between its users and external sources of information."

In so far as it gives some guidance on the extent to which other sources of materials are available and used, its findings are also relevant to our First Objective, Part 1, Sections 14-17 on the provision of materials for students and staff, and may also help in suggesting the level at which Precondition 4 b and d i.e. study space and noisy and quiet areas (see Part 1 Section 18) need to be provided.

The CELRP has carried out surveys of library use in nineteen colleges of education; sixteen of these, including six in the Nottingham ATO, three in the Manchester ATO, four in the Southampton ATO, and three in sample colleges not situated in any of these ATO's took place in November 1971. Part of the seventeenth survey, in the Manchester ATO, was carried out in the previous Spring. The eighteenth and nineteenth surveys, one in the Manchester ATO and one in a sample college, were carried out in February 1972. We sought to investigate sources of supply of books and similar materials available to students and staff. There are three such sources. The college's own library, library facilities available elsewhere and books owned by the students themselves. We have concerned ourselves firstly with library provision. The primary purpose of these surveys, therefore, was to investigate the proportion of library use by students and staff carried out in the college libraries and the proportion taking place in other libraries. Broadly, there are three different types of library use. First, reference and study, which is taken to include all time spent by staff and students using a library as a place to work, whether or not they are making use of library materials. Second, browsing, which is taken to include all time spent looking through materials whether seeking something to borrow or for reference use; and third, borrowing, which is taken to include only that time spent taking the "borrowed"book to be issued or checking on the possibilities of borrowing a particular item.

It is, therefore, possible to investigate not only what proportion of time is spent in each kind of library, but whether different libraries are used for different library activities. It is reasonable to suppose that students and staff are likely to make more regular use of their own library, which is immediately available to them on site, than they are of other libraries. Therefore, two forms were sent to each person taking part in the survey; a questionnaire, which listed a variety of possible types of library, and which asked students to record their use of each in a particular week; and a diary, divided into one section for each day of the week, on which students were asked to record their use of their own library throughout the same week.

All the staff in the colleges concerned received these questionnaires and diaries. Unfortunately, it was not possible to carry out this survey amongst the staff in three of the nineteen colleges referred to above.

It would have been impracticable to organise a complete survey of the whole student population in these colleges, therefore random samples of students, stratified by year groups, were chosen, but in some cases very small groups of students on special short-term courses were totally excluded. The survey forms were coded to indicate whether the student was following a Certificate of Education, B.Ed. or Post-graduate course. The proportion of students sampled in each college varied, as did the response rate. These figures can be found in Table 1. The survey forms (see Appendix V A) were administered by post. Reminders, and in some colleges, second reminders were sent out to those students who did not return the first questionnaire and diary. Questionnaires and diaries returned initially were analysed separately from those returned after reminders.

It did not prove possible to achieve complete consistency in the situations pertaining in all colleges. In many colleges one year or part of a year were on teaching practice at the time of the survey and in some colleges it did not prove possible to survey these students. It is to be expected that students on teaching practice will make different use of the library from those who are not. For this reason, where these students were surveyed the data obtained has been analysed separately as well as integrated with the results from students not on teaching practice. In addition, it has already been noted that in three colleges the surveys were carried out at different times from the others. Different survey forms and methodology were also used in these three colleges.

Before deciding to carry out this survey in so many places a pilot survey was carried out at Didsbury college of education. This consisted of a questionnaire which asked students about their use of the college library; their book buying habits; and their use, in a typical week, of other libraries. (See Appendix V A). Only the information concerning their use of other libraries was compatible with data obtained from the other colleges. Therefore, this information, from 160 respondents, has been used in that part of the following report, which refers to Didsbury's students use of other libraries. As this questionnaire did not provide the same sort of information concerning use of their own library, further surveys were carried out. An Instant Diary was given to students over a period of three days from 17th. - 19th. March 1971, but this was not considered suitable for comparison with the similar information from other colleges. A diary on exactly the same lines as that used elsewhere was also administered. However, only 89 students responded and instead of a random stratified sample being chosen from the student population, a stratified sample of people actually using the library was chosen. The result, of course, is that a picture is given which implies that all Didsbury students use their own library in one week; this obviously is not necessarily true. There are further problems (which will be considered in due course), created by using separate groups of students for the two parts of this survey and carrying them out at different times.

As a result of analysing the 16 surveys which took place in November, various problems in interpretation of the questionnaires presented themselves. It had not been possible to carry out this survey at Padgate and Furzedown originally, owing to developments in the libraries concerned. When it became possible for these libraries to organise the survey, the opportunity was taken to endeavour to improve the questionnaire to solve those problems which had been discovered at that time. It is part of our aim to produce a suitable methodology for carrying out surveys of this type in the future and there will be further discussions on this matter in Section 16. The alterations were:-

TABLE 1.a

SURVEY INFORMATION

	No.of Students sampled	% of Total	No.of Students Returning 1st. returns	No.of Students Returning 2nd. returns	Total Response	% of Student Returns	TP	No.of Staff Returns	% of Total
B.G.	160	30	77	46	123	77		38	49
B.L.	195	25	101	40	141	72	2nd yr.	18	28
E.H.	199	50•	125	25	150	75	2nd yr.	32	52
K.	178	35	86	33	119	67	½ 2nd yr.	40	67
M.	158	45•	74	22	96	61		45	52
N.	200	15	106	36	142	71	½ 3rd yr.	51	42
KA	120	17	53	27	86	72	½ 3rd yr.		
P.	147	15	51	49	100	68	1st. yr.	28	31
S.S.M.	143	29	82	29	111	78		29	66
W.	145	21	52	48	100	69	2nd. P^{+}.G.	21	28
D.	+200 200	13 17•	138 89	22	160 89	80 45	3rd.		
Man.	150	27	64	54	118	79		21	24
Mat.	163	25	64	46	110	67	3rd yr.	26	37
Pad.	152	15	50	30	80	53	P.G.		
S.	135	24	45	57	102	76	3rd. yr.	50	88
C.	173	20	74	41	115	66		46	52
F.	150	20	35	35	70	47			
R.B.	439	52•	123	63	191	43	3rd. yr.		
T.A.S.C.	165	20	68	30	98	59	3rd. yr.	68	74

• The students on T.P. were not included in the sample in these colleges.

+ These figures refer to the questionaire survey, the following set refer to the diary survey.

A breakdown of this table into year groups can be found as Table 1 in the appendix. This table also shows average number of visits made by each year.

Percentage response rate.

	Students		Staff	
Mean average	67)	students	49)	staff.
Median average	69)		49)	

1. the provision of definitions for the terms Browsing and Borrowing,

2. clearer instructions on the questionnaire concerning students' use of libraries during vacation.

Originally they were asked only for their use of other libraries during the vacation. As the vacation concerned was the long summer one, there was considerable confusion as to whether the whole of the vacation or one week was intended.

The vacation concerned at Padgate and Furzedown was the Christmas one, and a question asking if they used the college library was also included.

2. Initial Analysis.

All the times spent on each activity, separately, and all the books used were totalled for each year group of students, keeping certificate of education students' totals separated from B.Ed. students' results. All the first round results were kept separate from all the second and third round results. Staff results were analysed as one group.

In most colleges the production of the sample, the preparation of the survey, and the initial analyses of the returns were carried out by the librarian concerned and his staff. We are most grateful for this help at source, without which it would have been impossible to undertake such a vast piece of work.

METHODOLOGY OF ANALYSIS

3. General Problems

There are two main types of problem attendant on a survey of this nature, carried out in a number of different institutions and at different times. Firstly there are general problems arising from the analysis and results from all the surveys, and secondly particular problems arising from one or a group of colleges. The two biggest problems, applicable to the vast majority of surveys, were those of interpretation of the terms Browsing and Borrowing, and the interpretation of Vacation Use. These problems were avoided at Padgate and Furzedown, but this in itself presents a problem of comparison between these colleges and the rest. Most students included in their Borrowing time some time which we have defined as being Browsing time It was suggested by one of the Nottingham A.T.O. Librarians that this was useful in so far as it showed the student's own feelings of how long it took him to borrow a book, regardless of what processes he felt this included. Nonetheless it was helpful to try and separate the Browsing time from the Borrowing time, and this was achieved at Padgate and Furzedown by including definitions. This means, of course, that whenever proportions of time spent on each activity are compared we cannot make direct comparisons between any of the other colleges and these two. However proportions of time spent in each library are not much affected as the same student filled in the diary and the questionnaire.

The problem of difference of interpretation did arise at Didsbury where the diary and questionnaire were filled in by different students at different times. Those who completed the diary were given instructions verbally as to the definitions of the terms to be used; those who completed the questionnaire were not so instructed. The effect of this can be seen in Table 2 in **Appendix** V.A; the proportion of time they spent Borrowing in the college library is very small in comparison with Borrowing time spent in other libraries simply because the latter includes some Browsing time, while the former does not. Therefore it is not possible to know the proportions of Borrowing time in each library by Didsbury students.

It was found that there were no vast differences between the amount of time spent or books used by students in different year groups, except where students were on teaching practice, and also in the case of certain types of library which were only available to some groups of students. In any case, the number of students in each year group was usually too small for anything very definite to be said about that group on its own. It was therefore decided to look at the colleges' use of different kinds of library by all students as one group. The only exceptions made were for those students on teaching practice, who were initially included in these totals, and then taken out to see what the results would have been if there had been no students on teaching practice. They were also investigated separately to give a pattern of library use for students on teaching practice only. All colleges can show a pattern of use for students not on teaching practice but only some can show use during teaching practice. Since in some colleges students on teaching practice were not surveyed, and in others there were no students on teaching practice at the time of the survey, the first set of tables in Appendix V.A Table 2 show the proportionate use by students, excluding those on teaching practice. The second set show figures including students on teaching practice, where these are available, and the third set of figures is for the teaching practice students only.

4. Accuracy checks.

There are two reasons why results obtained from a survey of this nature are subject to inaccuracy. Firstly we are relying on students to understand the forms correctly and fill them in properly and accurately, over a period of a week, without any guidance or explanation of the type that is given when the questionnaire is handed out by an interviewer, and completed in his presence. It is not to be expected that every student carried the diary around with him every day and filled in, having checked against the clock. just how long he had spent in the library. It is far more likely that he completed it from memory later on, perhaps at the end of the week. In these cases it is natural for people to paint a slightly better picture of themselves than may really be the case. Thus ten minutes in the library would be indicated as a quarter of an hour, and twenty minutes as half an hour. This is generally termed the "rosy glow" factor.

The other cause of inaccuracy is affected by the response rate. If a proper stratified random sample of the population is taken, and a 100% response is obtained, it is reasonable to suppose that all the elements in the community will be included in correct proportions in the responses. However in no case was 100% response achieved nor in a postal questionnaire is it ever likely to be. Some response rates were very good, as can be seen from Table 1a. However there is reason to believe that those people who do not respond may well behave differently from those who do. There is evidence in the literature of surveys that people who do not respond are likely to be less interested in the matters which the survey is investigating than those who do. If this is the case it is likely that there was a higher proportion of non-library users among those who did not return the questionnaire, than among those who did return it. The very high proportion of students replying who had used the college library, in some cases in the upper 90% level, does suggest that this was the case. It is of course also possible that some people wereinduced to use the library during the week in question merely so as to have something to put on their diary, although perhaps they would not otherwise have done so.

There was only one question on the diary whose answers it was possible to check in any way against existing known figures. Students were asked to say how many books they had borrowed during the week. The librarians recorded them for the weeks in question. If the sample results were accurate the average number of books borrowed per student, found from the total on the diary. divided by the number of students who returned the diaries, should have been the same as that found by dividing the issue statistics by the total student population. In all cases the results from the first round suggested more borrowing than was the case according to the issue statistics. In most cases the results from the separate second round were very much closer to the results according to the issue statistics,and in one case were, in fact, lower. It has been suggested by Butcher (1) that people who reply after reminders have been sent out are more likely to be similar to those who fail to reply at all, than are those who reply immediately. We have already noted that these non-responders are probably also non-users, and it was certainly true, in some colleges, there were more nil returns in the second round than in the first. Where the differences in the averages of the two rounds was not very great, analysis of variance was carried out and T distributions obtained in order to ascertain whether they were significant. Whenever the second round was more accurate than the first, and showed a significant difference, these results were weighted, i.e. it was assumed that the results of the non-respondents would have been the same as those of the second round, and the scores were adjusted accordingly.

(1) H.S. Butcher, Sampling in Educational Research - Statistical guides in Educational Research No.3 M.U.P. 1965.

TABLE 1b. BACKGROUND INFORMATION

Name of College	No.of Students	Main Courses Taken	Residential Day or Mature	No.of Library Staff	Size of stock and notes on type	Annual increase in stock, annual book grant, and duplication policy
B.Grosseteste	547 excluding T.P.	Cert.Ed. B.Ed	Residential and day (age does not matter)	1 Acad. 1 Prof. $2\frac{1}{2}$ Cler.	42,000	Stock increases by about 4,000 annually, Book grant for 1971/2 (year during which research undertaken) £9000 (incl.last year of a capital grant.
B.Lonsdale	780	Cert.Ed. B.Ed. In-service* & part-time * P.G. course.	Residential some day	1 Acad. 2 Prof. 2 Cler.	50,000 including departmental libraries 230 periodicals.	£9,500
Eaton Hall	690	Cert.Ed. B.Ed. 1 yr. craft course	mainly Residential	1 Acad. 1 Prof. 3 Cler.	50,000 including fiction. 200 periodicals.	very little duplication. £7840 p.a., c4000 additions p.a.
Kesteven	505 + 90 on T.P. & 120 at Peterborough annexe	Cert.Ed. B.Ed. mature at annexe* In-service courses	Residential, Day and Mature	1 Acad. 1 Prof. 3 Cler.	30,000 41,000 including annexe.	£8,600 including annexe branch
Matlock	788	Cert.Ed. B.Ed. In-service* Shortened course* Supplementary*	Residential and Day	1 Acad. 2 Prof. 2 Cler.	53,000	1970/71 £8,000 71/72 £11,000 72/73 £12,200
Nottingham	1329	Cert.Ed. B.Ed. P.G. In-service*	Residential and day	1 Acad. 4 Prof. 7 part-time Cler.	60,000 400 periodicals.	

Size of library	Opening Hours	Services offered	Layout of Library including Issue system and classification schemes.
9,300 sq.ft.	9a.m.-8.30p.m. Fri.9a.m.-5.30p.m. Sat.9a.m.-12a.m.	Temporary reference, reservations with recall notices. Some A.V.aids good library guide.	Bliss classificiation 'strip' subject index. Dewey children's books. classification. voucher issue system - purpose built building 2 storey.
Old lib. sq.ft. New lib. 9600sq.ft. seating 140. Old seating 50.	9a.m.-6p.m. Mon/Wed. 9a.m.-8p.m. Tues/Thurs. 9a.m.-5p.m. Fri.	Temporary reference, reservations, A.V. aids. Photocopying service Inter-library loans. Periodical contents listing	Several rooms in main building, very cramped difficult conditions. Issue slip system will be Browne in new library
3098 . sq.ft. 52 seats 10 easy chairs.	8.30a.m.-8p.m. Sat.mornings and vacations.	ILL Reservations Temporary reference. Periodicals lists Bibliographies Library guide	Rooms in central building very cramped but pleasantly laid out. Cheltenham classification still being phased out.
	9a.m.-9p.m. 9a.m.-5.30 Fri. Saturday mornings Saturday afternoons ref.only & supervised by duty lecturer	Short term reserved reference, loans; back periodical loans. Subject index to selected periodical articles incorporated in catalogue. ILL.	Slip issue system. 4 rooms in main building including quiet and talking areas, plus offices. Dewey classification.
7,000 sq.ft.	9a.m.-9p.m. supervised. 5p.m.-8p.m. 9a.m.-12p.m. Sat. study room, no books in it, unsupervised.	Reservations, ILL. Back periodical loans. Subject index to some periodicals. Bibliographies. AVA. Coin-op. photocopying. Periodical lists, recent additions lists.	Library rooms in ground floor of women's hall of residence converted from kitchens and dining room - two years ago. Large airy study room, (no books).
5,292 sq.ft.	8.30a.m.-10p.m. Sats. 9a.m.-5p.m.	Periodical indexing. Short term loans. Bibliographies, A.V. aids. Reservations, Accessions list, Library guide.	Purpose built building fairly new, upstairs reading room extension, few books - floor not load bearing. No book lift.

Name of College	Libraries relation to the rest of the College Buildings	Additional features (or events affecting use at time of survey)	Future or recent developments planned or needed
B.Grosseteste	near main building	rag week during survey. Classification and processing backlog.	new library opened 1971.
B.Lonsdale	college is on two campuses, library will be more centralised in future.	Four departmental libraries two miles away, not staffed by library.	Purpose built building, new library opening 1972, one of the four departments soon moving to main campus.
Eaton Hall	near dining room, common rooms and bedrooms. One hall of residence 2½ miles away however.	child studies completed before survey began. Staff travelling a long way to T.P's. T.P. centres in town 19 miles away - use not included.	Expansion urgently needed.
Kesteven	centrally situated in main building	90 Students on T.P. at this time were mainly from the more book based subjects and were not included in the survey. Peterborough students use of main library not included (visit once per week).	Study use high because library heavily used by groups working together and sometimes studying with own materials. Expansion in process.
Matlock	8 minutes walk from main teaching block. 20 minutes walk from education block 3 mins.from dining room, near students' common room.	long study-room opening hours: increase in internal use, supervision problems increase, illicit borrowing	Further alterations of present situation possible.
Nottingham	situated near teaching block and residences rather on the edge of the campus.	Rag day during survey. Shortage of library staff work space.	There are plans for extending the present library block.

Type of Courses and Assessment	Librarian's Comments	Situation in relation to other libraries.
Education examination assessment by formal assignments.	Increased use, especially internal, due to change to formal assignments.	On northern outskirts of city of Lincoln.
Assignments, course work, long essay or study, some test papers, B.Ed. exams.	Changes in patterns of use. Students borrow much for assignments - work in own rooms.	fairly near Derby.
Continuous assessment Formal assignments/special studies, final B.Ed. exams, but dissertation part of requirement for Hons.degree.	increased use	isolated.
Course work, some exams in Education, History, Drama, French. B.Ed. 80% exams. 20% course work.	Great increase in use, especially of periodicals. 1969 - 418 issues 1971 - 1,842	fairly isolated access to Grantham by college bus.
Formal assignment for Certificate course. 80% exam. 20% course assess. for B.Ed. education. Other B.Ed. subject variable. Dissertation possible.	increased use	isolated.
Cert.Ed.course work B.Ed.mainly exams. Some course	increased use	More awkward to reach Nottingham facilities than situation suggests.

TABLE 1b. BACKGROUND INFORMATION (continued)

Name of College	No. of Students	Main Courses Taken	Residential Day or Mature.	No. of Library Staff	Size of stock and notes on type	Annual increase in stock, annual book grant, and duplication policy
K.Alfred's	1000	Cert.Ed. B.Ed, (4th yr)* P.G.*	Residential and Day	1 Prof. 1 Acad. 3⅔ Cler.	50,000	£12,000 6 - 7000 very little duplication
Portsmouth	957	Cert.Ed. B. Ed.	Residential and Day	1 Acad. 1 Prof. 4 Cler. 2 evening Cler.	60,000 (Jan.72)	4500 vols. approx. £9500 Apl.71 - Mar.72
Sarum St. M.	500	Cert.Ed. B.Ed. 2 yr. course.	Residential and Day.	1 Acad. 1 Prof. 1 Cler.	30,000 approx.	
Weymouth	678	Cert.Ed. B.Ed. P.G.	Residential and Day.	1 Acad. 1 Prof. 2⅓ Cler.	23,000 + 8,000 childrens. 240 periodicals	£6000 6000 books and capital grant minimal duplication.
Didsbury	1550	Cert.Ed. B.Ed. P.G.	Residential and Day	2 Acad. 3 Prof. 5 Cler.	70,000	£14,000 10,000 books 1,000 A.V. 450 periodicals.
Manchester	FT.669 PT.92	Cert.Ed. P.G. In-service part time	Day and Mature	1 Acad. 1 Prof. 2½ Cler.	40,000	fairly heavy duplication
Mather	658	Cert.Ed. B.Ed. In-service	Day	1 Acad. 1 Prof. 1½ Cler.	30,000	beginning to increase duplication DES voluntary college recommendations book grant.

Size of Library	Opening Hours	Services offered	Layout of Library including issue system and classification schemes
95 seats	9a.m.-7.p.m. Ref.closes 5p.m.-7p.m. Sat.lending only 8.45a.m.-11.45a.m.	Reservations, ILL, Staff select recent additions.	Carpeted. overcrowded (books) Childrens & A.V. materials separate. Separate reference/reading room.
5486 sq. ft.	9a.m.-10p.m. childrens 9a.m.-5.30. Sat. mornings 9.30a.m.-12.30p.m.	Short loan, ILL, Library guide, accession lists, periodicals and book lists, A.V. aids, reservation system.	One floor houses all save children stock. Long, narrow, very quiet. Tables between shelves, childrens' library upstairs.
	9a.m.- 6p.m. & Saturday. Staffed continuously. Open all term.	Temporary ref.copies of back number periodicals. Reservations, guide includes classification explanation.	Library on two floors. T.P.library separate and some distance away. Slip issue. Modified education classification.
3260 sq. ft. 100 seats	9a.m.-9p.m. Sat.mornings Ref. library 9a.m.-5p.m.	Reservations, fines, book lists, periodical article lists, temporary reference, short loan accessions lists, periodical lists, resource centre in progress	Lending and reference libraries in separate buildings. Very cramped. No communicating link between 2 points. Also separate rooms for Junior Library, stack, etc.
7,600 sq. ft. 240 seats	9a.m.- 8.30p.m. 9a.m.- 5.30p.m. Fri. Sat.morns. during T.P.	Temporary reference, library guide, interloan photocopies large A.V. collection 48 hr. loan.	Separate building, many small rooms, separate sequences stack.
	8.30a.m.-8.30p.m.	Reservations Short term loan	Situated in 2 parts in separate buildings 10 mins.walk away. Self issue. Bliss classification.
3,640 sq. ft. 120 seats	9a.m. - 7.30p.m.	Reservations, A.V. with good indexing. Temp.Ref. short term loans, acc.list for staff, library guide.	Backlog of accessioning, etc., very cramped working conditions for staff. Slip issue, strip subject index. Sep.quiet and talking areas (as far as possible).

Name of College	Libraries relation to the rest of the College Buildings	Additional features (or events affecting use at time of survey)	Future or recent developments planned or needed.
K.Alfred's	central near main entrance to old part built 1962-3, new separate ref.library (1969) bridge access to students'union.	recent uncatalogued departmental collections basic and specialised.	Enclosing courtyard to form large unified library in perhaps 2 years time)
Portsmouth	Central in relation to other teaching space. Distant from Union communal and Admin. buildings	Students residences are near and many students prefer to borrow books and work there.	Approx. 6,500 sq.ft. short fall in space from DES Red Book standards. Extension planned for A.V. resources library and reading room.
Sarum St. M.	fairly central but buildings scattered	Teaching Practice heavily empties college in summer.	
Weymouth	in main building (upstairs) but split, also has old library with 20 seats, very cramped, music room above reference room. Reference library was previously a laboratory.	college doubled student numbers in 2 yrs. 1968-70. P.G. and 1st. yrs. on T.P. at commencement of survey. In last week of same 3rd. yrs. on T.P.	New library in centrally placed education block planned for 1973.
Didsbury	centrally situated		Clerical staff has increased by 1. Shortly moving into new purpose built building, 21,600 sq.ft.
Manchester	divided acc. to subdivision. Whole college in old town centre. Overcrowded conditions.	One library was 25 mins. away at time of survey. Departmental libraries are expanding.	
Mather	college is in 2 buildings, 100 yards apart, separated by a main road. Library in Admin. building but not near main entrance. Students activities take place in the other building.	Survey sample has under-represented B.Ed, students, 3rd year students on T.P.	expansion for book reader space, and working area needed.

Type of Courses and Assessment	Librarian's Comments	Situation in relation to other libraries
course assessed mainly	course assessed work has had no affect on library use.	Near Winchester but no bus.
course work, one day library based projects, examinations, practicals, orals, special studies.	'Tidal' pressure due to Box & Cox arrangements. Autumn term very heavy. Summer term fairly light.	Isolated.
education all course work the rest 50-50		Salisbury, otherwise isolated.
course work, one day projects, 3rd year Educ. exam. P.G. assessed, general studies assessed, day projects acc.to dept.	increased demands on resources due to course work assessments.	Isolated, apart from local libraries.
exam. and assignment latter evenly spread	more spread of work evenly over year, less pressure from everyone seeking same thing at same time since change to assignments	fairly well placed, bus ride to large public, institute and special libraries.
exam.and assignment, P.G. assignment, students heavily time tabled.	very little internal use - students always in a hurry when using library.	centrally situated.
block time-tabling to avoid extra travel by students, probably no more time-tabled than elsewhere. Assignments in course work, long essays, and exams.	heavily time tabled	centrally situated but many students have long journeys to college.

TABLE 1b. BACKGROUND INFORMATION (Continued)

Name of College	No.of Students	Main Courses Taken	Residential Day or Mature	No.of Library Staff	Size of stock and notes on type	Annual increase in stock, annual book grant, and duplication policy
Padgate	1059 including serving teachers	Cert.Ed. B. Ed. P.G. in-service	Residential Day and Mature	1 Acad. 2 Prof. 4 Cler.	60,000	5,000 1970-71 9,000 1971-72
Sedgley Park	559	Cert.Ed. B.ed.	Residential Day and Mature	1 Acad. 1 Prof. 1½ Cler.	35,000	4,700
Chorley	1100	Cert.Ed. B.Ed. in-service	Day Mature	2 Acad. 3 Prof. 3½ Cler.	55,000	10,000
Furzedown	776	Cert.Ed. B.Ed.	Residential and Day	4 Prof. 3 Cler. (inc. 2 trainees)	60,000	4,300 1970/71
Redland	840	Cert.Ed. B.Ed. Special Ed. In-service Mentally handicapped	Residential Day and Mature	1 Acad. 2 Prof. 3 Cler.	32,408	£11,000 1971/72 £12,340 1972/73. Duplication limited.
T.A.S.C.	825	Cert.Ed. B.Ed. in-service	Residential Day and few matures	3 Prof. 2 Cler. 3 evening Cler.	50,000	as DES formula

Size of Library.	Opening Hours	Services offered	Layout of Library including issue system and classification schemes
13,440 sq. ft. inc. stairs and lifts.	9a.m. - 9p.m.	reservations, ILL	3 storeys.
	9a.m. - 7p.m. school collection 9a.m.-9p.m.	temporary reference library. course option, bibliography, reservations, ILL Guide, Publishers' exhibitions.	limited study space, book card issue, Bliss classification.
	9a.m.-5.30 p.m. 9a.m.-8p.m. Tues.Thurs. 5.30p.m.-10.50p.m. unstaffed	resource centre, curriculum courses; school libraries/childrens' books, etc. extensive ILL	limited study space, lack of permanent micro reader facilities.
7,194 sq.ft.	Mon.-Fri. 8.45a.m.-8pm Sat. 9a.m.-12a.m.	reservations, ILL, bibliographies, resources area (AV), periodical indexes, microfilm reader photocopying	3 floors basement - resources s.s. records, ground floor - issue desk stacks, periodicals. 1st floor stacks and separate model school library.
3,937 sq.ft. 64 seats	8.30a.m.-10.30p.m. 8.45a.m.-6p.m. or 8p.m.Staffed Sat.8.45-12p.m.	bibliographies book lists, periodical indexes, several lecture courses, displays, reservations, ILL, AV large collection 11,700 items of all types. News cuttings	limited study space. one room main library; separate S.S. room and closed access A.V. room 17th ed. Dewey, Book card self-issuing.
7,000	9a.m.-9 p.m. 10a.m.-9p.m. Sat. 2p.m.-9p.m. Sun.	resource centre, AV, the hardware and software loaned, and sale of materials, reservations, ILL.	split levels, 2 mezzanines and extensions.

Name of College	Libraries relation to the rest of the College Buildings	Additional features (or events affecting use at time of survey)	Future or recent developments planned or needed.
Padgate	centrally situated, but main doors awkward to get to. Some distance from students' hostels.	Just moved into new library at time of survey and closed during the evenings at this time due to power workers strike. Heavy use does occur in evenings.	New library opened 1972. Has changed clientele using, because geographical situation of library altered. Coin-op. photocopier and sound recording equip. to be added soon.
Sedgley P.	centrally situated in teaching and main block. T.P. library in separate room.	Staff use by 'phone not shown. One year on T.P.	Compulsory library course to be introduced soon for all students. Plan to expand library upstairs and thus more than double its size.
Chorley	central		New college in process of construction. Library scheduled for phase 2.
Furze-down	centrally situated in main administrative block.		extensions at first floor level planned but will not be sufficient.
Redland	situated on first floor of admin. & teaching block. A.V. on next floor. Fairly central.	major assignments not in progress at time of survey	recommendation for further 6000 sq.ft. Plans to centralise & rationalise facilities by using whole floor above existing library as additional area.
T.A.S.C.	front centre	reservation system new. A new library - a unified resource centre - in a new college.	Optional lecture course has started for 2nd years in professional studies.

Type of Courses and Assessment	Librarian's Comments	Situation in relation to other libraries.
mainly exam. course, first T.P. followed by 2nd T.P. immediately.	last week of autumn term and first week spring term, exceptionally rapid children's book exchange.	fairly near public library, but inconvenient access to to same.
examinations course work options, long essays, some exam. work in most subjects.		near local library facilities, 15 mins. bus to large public library and special facilities.
exams. course work - essays - extended studies.	lack of rigid time-tables help to space out demand on limited physical resources. Increase in extended study work led to sharp increase in ILL work.	assortment of fair library resources within 10 mile radius.
exams, long essays, continuous assessment		easy access to central London.
continuous course assessment	library overcrowded when assignments under way. Students heavily time tabled. Stock very crowded.	fairly central, no access to university or school of education libraries except 4th years.
B. Ed. honours, selective and compulsory courses offered in 9 broad subject areas on a semester basis.		6 miles from Leeds.

TABLE 1c. INFORMATION CONCERNING OTHER LIBRARIES SERVING EACH COLLEGE OR ITS AREA.

Name of College	County H.Q.	Large City Central	Medium Central	Small Central	Divisional/ District/ Large Branch
B.Grosseteste	Lindsay & Holland b) a) those living in area			Lincoln a) 9.30 a.m. - 7.30 p.m. 9.30 a.m. - 5p.m. Sat.	
B.Lonsdale			Derby a) 2 miles 9.30 a.m. - 7/8 p.m.		
Eaton Hall	W.Bridgford, Nottingham (34 miles)	Sheffield 26 miles Nottingham 30 miles	Doncaster 20 miles Lincoln 22 miles	Worksop 8 miles	
Kesteven	Kesteven d) 14 miles at Sleaford			Grantham a) 6 miles	
Matlock	Derbyshire d)				Derbyshire Schools library branch a) T.P. b) others
Nottingham		Nottingham 5 miles d)			1 mile Nottingham City Branch
K. Alfred's	Hants a) 1¼ miles 8.30 a.m. - 6.30 p.m.			Winchester a) 1¼ miles 9.30 a.m. - 7.30 p.m.	
Portsmouth			Portsmouth 2 miles		
Sarum St.M.				Salisbury a) 1 mile	
Weymouth	Dorchester a) d) 8 miles 9.30 a.m. - 7 p.m.			Weymouth a) 1½ miles 10 a.m. - 8 p.m.	

Key a) reference and borrowing: all students
b) reference only
c) use permitted by group mentioned, on request only
d) used through the college library.

Where only one group of students has use rights this group is named after the key, e.g. a) T.P = use category a) for students on T.P. only.

BEST COPY AVAILABLE

Branch	College	University	School of Education	Other
Lincoln a) 100 yards 10 a.m. - 8 p.m. 10 a.m. - 5 p.m. Sat.		Nottingham University c) 4th years a) 40 miles	Nottingham a) 4th years c) others	Lincoln Cathedral a) Record office b)
		" 16 miles	" 16 miles	
Retford a) 10,000 vols. 2½ miles 9.30a.m. - 7.30p.m.		" 34 miles	" 34 miles	
		" 30 miles	" 30 miles	Lincoln b) County Archives 30 miles
		" 25 miles	" 25 miles	Archives Matlock
Matlock Derbyshire County a) 9 a.m. - 7 p.m.		" 6 miles	" 6 miles	
		Southampton b) a) B.Ed 12 miles	Southampton b) a) B.Ed. 12 miles	
Milton branch 100 yards small general	Poly 2 m.b) Art 2 m.b)	" 20 miles	" 20 miles	
	Coll.of Tech. 9a.m.- 9p.m. b)	" 30 miles	" 30 miles	Souter & Clerical ¾ mile a) 9a.m.- 5p.m.
	S.Dorset Tech.College Weymouth b) d)	" 60 miles	" 60 miles	

TABLE 1c. CONTINUED.

Name of College	County H.Q.	Large City Central	Medium Central	Small Central	Divisional/ District/ Large Branch
Didsbury		Manchester a) 9 a.m. - 9 p.m.	Stockport a) 3 miles		
Manchester		Manchester a) $\frac{1}{4}$ mile			
Mather		Manchester a) $\frac{1}{2}$ mile	Stockport, Bury, Eccles, Oldham, Bolton, etc.	some a) day students	
Padgate	County Preston 30 miles		Warrington 3 miles		
Sedgley P.		Manchester a) 3 miles			Lancs.County a) 1 mile
Chorley	Lancs.County Preston 9 miles	Manchester a) 25 miles	Preston a) 9 miles Wigan 9 miles Bolton 10 "	Chorley a) $\frac{1}{4}$ mile	
Furzedown		Westminster and other central London libs. easily accessible by tube	Wandsworth 15 minutes by bus		
Redland			Bristol a) 2 miles		
T.A.S.C.	W. Riding H.Q. Wakefield	Bradford a) 7 miles. Leeds a) 7 miles		Horsforth a) 1 mile	

Key a) reference and borrowing:

b) reference only
c) use permitted by group mentioned, on request only
d) used through the college library

Branch	College	University	School of Education	Other
Didsbury a) ¼ mile		Manchester c) 9a.m. - 9.30 p.m.	Manchester a) 9.30a.m. -8p.m.	Chethams b) Rylands b) Manchester Educ. Comm.
		" 1½ miles	" 1½ miles	Chethams b) ¼ mile Rylands b) 100 yards. Manchester Educ.C. ¼ mile.
Hazel Grove, Cheadle, Bramhall, etc.	a) some day students	Manchester c)		
Woolston 1½ miles (no bus) Culcheth 2 miles(bus)		" 17 miles		
Lancs.County a) ¼ mile		" 4 miles	" 4 miles	Chethams b) Rylands b) Manchester Educ.C.
		Lancaster 30 miles	Lancaster 30 miles	
Tooting ¼ mile		London (25 minutes by tube)	London	Innumerable special libraries in central London
Bristol ¼ mile		Bristol c) 4th year staff	Bristol c) 4th year staff	
	City of Leeds & Carnegie college a) 5 miles. Leeds Poly. 7 miles	Leeds 7 miles. Brotherton a) B.Ed b) Others	Leeds 7 miles	Leeds Springbank b) teachers 5 miles Bradford Greencliffe teachers' centre b) 7 miles.

they are in remembering how many books they had just walked out of the library with under their arms. When we come later on to look at average use of college libraries and at patterns of use. we shall have to consider again the effect of these inaccuracies. However, there is no reason to assume that they affect the accuracy of the figures shown for proportionate use of various kinds of library, which is the primary information which we sought to investigate. Obviously nil users drop out as soon as we look at proportions of use of different types of library, and if there is some exaggeration it is likely to have affected all the figures equally since the same student filled in the questionnaire and the diary exaggerations. It will, therefore, be nullified when we look at the figures as proportions instead of as raw scores. Only when raw scores are needed later in this report, will it be necessary to make any further allowance for these inaccuracies.

PROPORTIONATE USE OF COLLEGE AND OTHER LIBRARIES.

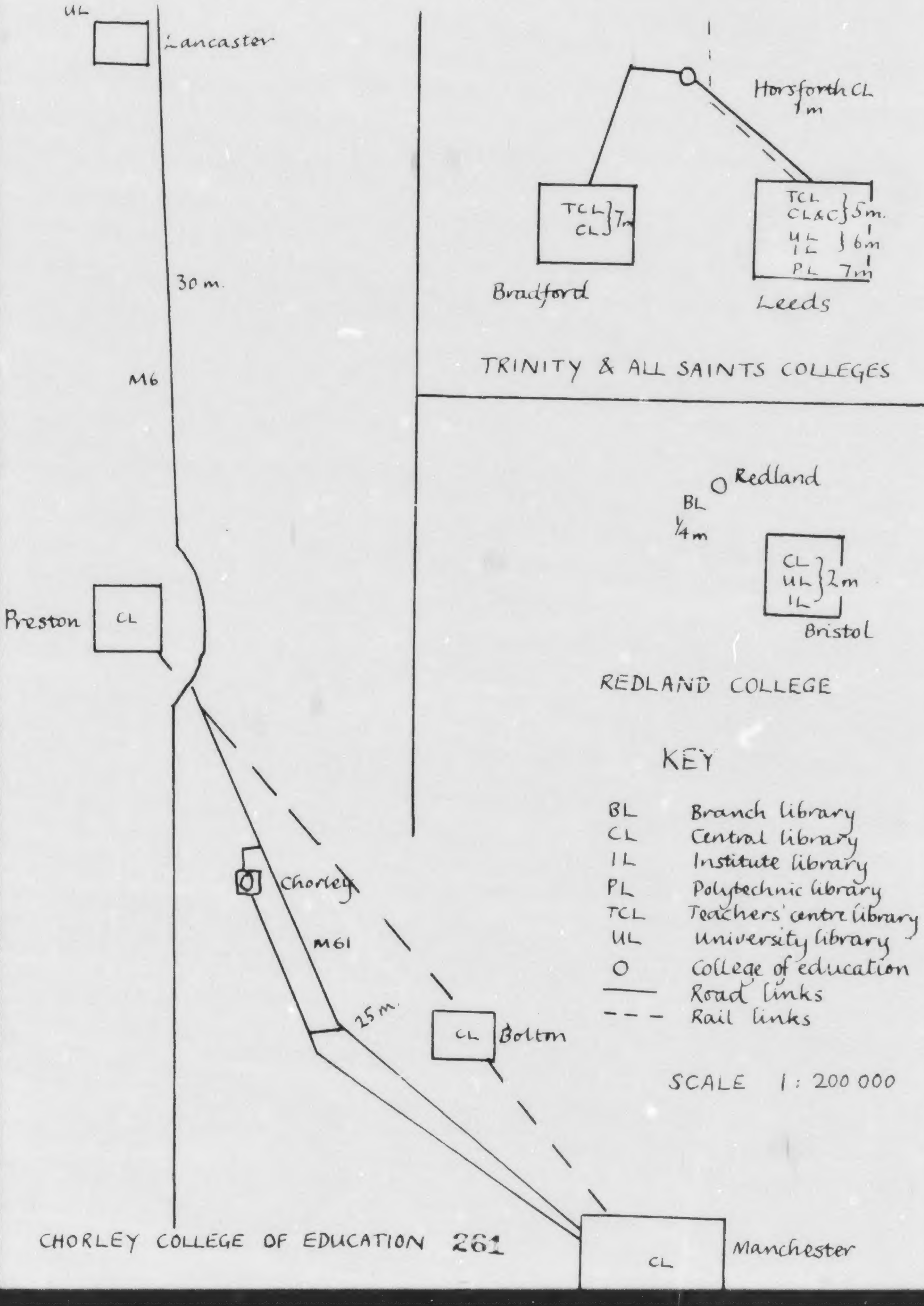
5. Detailed tables showing proportion of use of college, public, university, institutes of education, and other libraries can be found in Appendix V.A, Tables 2 - 2.3. These show accurate proportions of books used both internally, i.e. for reference and study, and externally, i.e. for borrowing; of time spent studying, browsing and borrowing, and of students studying and borrowing, to the nearest percentage. Where the proportion of use of a particular library is less than half a percent it is shown by an asterisk. The only occasion where figures on this table may be inaccurate are where one student in a small group made very heavy use of an unusual type of library. In such cases, the student may well have been the only member of the college using that library in the period concerned, but will have been taken to represent the proportion of use by the whole population. Occasions where this has happened have been indicated.

The tables are grouped, as are all tables in this part of the report, alphabetically within ATO's, and in the following order; Nottingham ATO, Southampton ATO, and Manchester ATO, the sample colleges not belonging to any of these ATO's come last. The first list includes all 19 colleges, and shows the proportionate use of each type of library by those students not on teaching practice. The second includes only those colleges who surveyed students on teaching practice, and shows proportionate use of all types of library by the whole student population, including T.P. students. The third list is of the same colleges as the second, but shows the use by the year or half-year on teaching practice only. The fourth list shows the proportionate use of different types of library by staff, in the 16 colleges where they were surveyed.

6. Overall use of all library types

Before we consider in detail the proportionate use made of other libraries for a particular kind of use, it is useful to see the overall proportions for all kinds of use. On the three ATO maps on Table 1 there are circular sectional diagrams. These show the proportion of total time spent in each library. Alongside these are bar charts which show the proportion of students who used each kind of library during the period of the survey. The map also shows the relative isolation of each college and gives the distance in miles, and where applicable, available means of transport to libraries likely to be of use to students. The sketch maps show the distance from the four sample colleges to their other library facilities.

(254-260)


UL
Lancaster
30 m.
M6
Preston
CL
Chorley
M61
25 m.
CL
Bolton
CL
Manchester
Horsforth CL
1 m
TCL
CL
7m
Bradford
TCL
CL&C
5m.
UL
IL
6m
PL
7m
Leeds
Redland
BL
¼ m
CL
UL
IL
2m
Bristol
KEY
BL Branch library
CL Central library
IL Institute library
PL Polytechnic library
TCL Teachers' centre library
UL University library
O College of education
Road links
Rail links
SCALE 1 : 200 000

TRINITY & ALL SAINTS COLLEGES

REDLAND COLLEGE

CHORLEY COLLEGE OF EDUCATION

It is noticeable that most of the colleges in the Nottingham A.T.O. and all of the colleges in the Southampton A.T.O. are some distance from a large city where university or institute facilities are available and are generally some distance from large public library services. In the Manchester A.T.O., however, the colleges are very much better situated for such facilities, with the exception of Padgate, and, to a certain extent, Sedgley Park. Further details showing the particular facilities available to each college are set out in Table 1C.

7. Use of own college and public libraries.

Tables 2a and 2b show, in groups of percentages, the proportion of reference, browsing and borrowing use which takes place in the student's own college library, and in all public libraries, central and branch, taken together. These tables show that, with the exception of Bishop Lonsdale in the Nottingham A.T.O. and Weymouth in the Southampton A.T.O., all these colleges' students spent at least 80% of their reference and study time in their own college library. Weymouth is only just on the border line being right at the top of the 70 - 80% section. The proportion of browsing time spent in the college library is never as great, but in this case, all the Nottingham and Southampton college students, with the exception of Winchester, spent at least 60% of their time in their own library, and Winchester is only just on the border of 60%. Generally speaking, the proportions of books used for reference and study in the college library are slightly less than the proportions of time spent studying there. This is to be expected, as it is obvious that students using library space to work with their own materials are likely to be using their own college premises rather than libraries elsewhere. Apart from this, the pattern of books used for reference and study is very similar to that of time spent studying in their own library. Borrowing is very much more an activity likely to take place in public libraries rather than in the college library, and here there is not such a noticeable distinction between colleges which are fairly isolated from good public library facilities and those which are more fortunately placed. For example, those students doing most of their borrowing in their own college library, include Furzedown, which is situated in London. However, this is again perhaps to be expected, as some of the borrowing will include recreation materials which can be obtained from the smaller county branches. The right hand side of this table shows in reverse order the proportion of library activity spent in public libraries. As is to be expected, this is virtually the left hand side table turned upside down, as the use of any other type of library is, in all cases, very small indeed, only occasionally occupying more than 10% of the total time spent on any particular activity.

8. Use of other libraries.

Table 2c shows the percentage of time spent in university and institute libraries together, for studying and borrowing. Books used in each category are also shown together with time spent browsing.
The figure given here for Kesteven has been inflated by heavy use by one student. Table 2d shows similarly proportions of time spent and books used for reference and for borrowing at all remaining types of library. This includes libraries at any type of college, and special libraries, such as archive collection and Rylands, Manchester. Use of university and institute libraries is heavily affected by rules governing their use put out by these libraries. Information concerning students' rights to use these, as well as other collections, is available in the relevant column of Table 1C.
This information taken together presents us with two extreme types of colleges where reference and borrowing use is concerned. For reference use, at the one extreme, is the college where practically the whole of the library use which takes place is in the college library. At the other extreme, is the college where students spend a noticeable amount, over a quarter of their time in fact, in other libraries.

TABLE 2a.

PROPORTION OF USE TAKING PLACE IN OWN COLLEGE

	Reference and study		Browsing	Borrowing	
	Mins.	Books	Mins.	Mins.	Books
100-90%	Eaton Hall Matlock Nottingham				
89-80%	B.Grosseteste Kesteven Portsmouth Sarum St.M. Padgate Sedgley P. Redland K.Alfred's Didsbury	B.Grosseteste Eaton Hall Matlock Nottingham Portsmouth Sarum St.M. Padgate Leeds Furzedown	Kesteven Matlock		
79-70%	Weymouth Mather Manchester Chorley T.A.S.C. Furzedown	Kesteven Didsbury Weymouth K.Alfred's Bristol Sedgley P.	Leeds Portsmouth Eaton Hall B.Grosseteste Padgate		Matlock Eaton Hall
69-60%	B.Lonsdale	B.Lonsdale Manchester Mather Chorley	Nottingham Sedgley P. Weymouth B.Lonsdale Sarum Furzedown Bristol	Furzedown Matlock Eaton Hall Nottingham Sedgley P.	Leeds Furzedown Padgate Portsmouth Kesteven
59-50%			K.Alfred's	Leeds Portsmouth Sarum St.M. Weymouth Padgate	Nottingham Weymouth Sedgley P Sarum St.M Bristol
49-40%			Chorley Mather Manchester	Manchester Kesteven Bristol B.Gross.	Manchester B.Grosseteste K.Alfred's
39-30%				B.Lonsdale Mather Chorley K.Alfred's	B.Lonsdale Mather Chorley

Note: colleges are in the correct order within each group.

TABLE 2b

PROPORTION OF USE TAKING PLACE IN PUBLIC LIBRARIES

	Reference and study		Browsing	Borrowing	
	Mins.	Books	Mins.	Mins.	Books
1 - 10%	Leeds Sarum St.M. Eaton Hall B.Grosseteste Portsmouth Matlock Kesteven Nottingham	Eaton Hall Nottingham Matlock T.A.S.C. Portsmouth Kesteven Padgate	T.A.S.C.		
11 - 20%	Weymouth Chorley Didsbury Bristol Furzedown Sedgley P. Padgate	Redland Didsbury Sedgley P. Weymouth K. Alfred's Sarum St.M. Furzedown B.Grosseteste	Matlock Kesteven	T.A.S.C.	T.A.S.C.
21 - 30%	B.Lonsdale Mather Manchester	Chorley Manchester B.Lonsdale	Sarum St.M. B.Grosseteste Padgate Eaton Hall Portsmouth Nottingham Sedgley P.	Nottingham Furzedown	Eaton Hall Matlock
31 - 40%		Mather	Furzedown Redland Weymouth B.Lonsdale	Sarum St.M. Weymouth Portsmouth Sedgley P. Matlock Eaton Hall	Sarum St.M. Weymouth Matlock Nottingham Padgate Furzedown Portsmouth
41 - 50%			Chorley K.Alfred's	Manchester B.Grosseteste Padgate	Manchester Redland Sedgley P.
51 - 60%			Mather Manchester	Chorley Redland Kesteven	K. Alfred's B.Grosseteste
61 - 70%				K.Alfred's B.Lonsdale Mather	Mather B.Lonsdale Chorley

TABLE 2.C. PROPORTION OF USE TAKING PLACE IN: UNIVERSITY AND INSTITUTE LIBRARIES

	Reference and study		Browsing	Borrowing	
	Mins.	Books	Mins.	Mins.	Books
10-15%	Kesteven Furzedown T.A.S.C.	Kesteven	T.A.S.C.	T.A.S.C.	T.A.S.C.
5 - 9%	Portsmouth Chorley	T.A.S.C. Furzedown Nottingham Padgate	Nottingham Portsmouth Padgate	Nottingham Portsmouth Weymouth	Weymouth Padgate Sarum
2 - 4%	B.Grosseteste B.Lonsdale Sedgley P. Eaton Hall Didsbury Matlock Nottingham Padgate K.Alfred's Sarum Weymouth	B.Grosseteste Sedgley P. K.Alfred's Matlock Chorley Portsmouth Weymouth Didsbury	Kesteven Sedgley P. B.Lonsdale Furzedown Eaton Hall K.Alfred's Chorley	K.Alfred's Furzedown Sedgley P. Sarum Didsbury Padgate Chorley	Sedgley P. Matlock Portsmouth Didsbury Eaton Hall Nottingham K.Alfred's Furzedown Chorley

all the remainder - 1% or less.

TABLE 2.D. PROPORTION OF USE TAKING PLACE IN: OTHER TYPES OF LIBRARY (INCLUDING OTHER COLLEGE LIBRARIES)

	Reference and study		Browsing	Borrowing	
	Mins.	Books	Mins.	Mins.	Books
5 - 10%	Sarum Weymouth		Nottingham Sedgley P. Manchester	B.Grosseteste Chorley	Manchester
2 - 4%	Sedgley P. T.A.S.C. K.Alfred's Manchester Chorley	T.A.S.C. Mather Sedgley P. Kesteven Matlock Redland Manchester Chorley Sarum K.Alfred's	B.Grosseteste Matlock Sarum Chorley	Eaton Hall Weymouth Sedgley P. Portsmouth Sarum Manchester Redland T.A.S.C.	B.Grosseteste Eaton Hall Matlock Didsbury Sedgley P. Chorley

all the remainder - 1% or less.

Where Borrowing is concerned the extremes are, a college whose students make considerable use (at least two thirds) of their college library, and at the other extreme the college where about two thirds of this activity takes place in libraries other than the college's own. Sectional diagrams showing the extremes for these two activities, reference and borrowing, are shown here in order to illustrate these differences. The only figures for other library use, which are checkable, are those for borrowing use at school, or institute of education libraries . The school or institute librarian provided the information in Sect.9 concerning students actual borrowing for the weeks of the survey. From this table, it can be noticed that one or two of the colleges have recorded use of institute and university libraries where apparently no books at all were, in fact, borrowed by any student, at least during the time of the survey, and, in one case (Bishop Grosseteste) borrowing is indicated at an above average rate although, in fact, no students at this college are apparently registered as borrowers in the school of education. There are three explanations for this discrepancy all of which have perhaps played a part. Firstly these may be books obtained on inter-library loan, or books obtained by a friend at another establishment, such as a university, but have been recorded as books borrowed by the student. Secondly it is possible that students are not sure of the correct designation of the institutions they use and there has been confusion over the type of library they have visited on some occasion. Thirdly it is possible that illicit borrowing goes on at these establishments. It is not possible to know which of these factors has figured most in creating these discrepancies, and only considerable searching would be likely to produce a satisfactory solution. We have noted already a tendency for exaggeration in this, and it will be most likely to affect the result, where the use is by such a small proportion of the students that only one person's exaggeration or confusion can seriously affect the bracket into which the results fall. There is much less likelihood of such confusion arising about the other libraries they use, except in the case of central and branch libraries. This has been covered in the main text table by grouping all public library use under one heading. In any case, it is interesting to note that in several colleges the amount of borrowing from School of Education libraries recorded during the survey almost exactly tallies with that which would be expected from these tables. This is especially true in the case of K.Alfred's and Nottingham colleges. (See opposite.)

8.1 The proportion of students making use of each type of library for these three activities.

So far we have only considered the proportion of time spent and books used in each kind of library. Obviously in those colleges where a smaller proportion of the students' time is spent in their own library, it does not necessarily follow that they actually make less use of their college library. It could just as easily mean that they spend more time in all kinds of library. The information we have been looking at so far merely shows us what sort of library students are most likely to resort to for different purposes, and by comparing this with descriptions of college libraries and other libraries, and of their geographical relationship to these it is possible to get some idea of what influences a student when he or she decides to visit a library. It can be seen generally that geographical situation does play a part where heavy use of public libraries, especially for reference purposes, is concerned. The regulations of the libraries and their opening hours, also play a considerable part in affecting students' use. However, the adequacy and comfort of their own college library, and whether they themselves are residential or day students who find it easier to visit a library nearer to their home, are factors which are bound to play a part. We shall be considering shortly the students' own expressed reasons for not using other libraries. It is worth, however, noticing at this point what proportion of the student population is, in fact, making use of each type of library.

BORROWING AT INSTITUTE AND UNIVERSITY LIBRARIES

Name of College	Registered Borrowers	No. of books borrowed during survey.	Books on loan at time of survey.
B.Grosseteste	0	-	0
B.Lonsdale	2	-	19th Oct 5 9th Nov 26 17th Nov 13
Eaton Hall	5	-	19th Oct 7 9th Nov 16 17th Nov 13
Kesteven	0	-	0
Matlock	0	-	0
Nottingham	32	-	19th Oct 94 9th Nov 45 17th Nov 85
K. Alfred's	-	23 Institute 7 University	- -
Portsmouth	-	3 University	-
Sarum St.M.	-	5 Institute	-
Weymouth	-	-	-
Didsbury	*	12th Nov 5 19th Nov 3 26th Nov 13 3rd Dec 9	-
Manchester			-
Mather			-
Sedgley P.			-
Padgate			-

* No separate figures available

- No information available.

In some colleges a high proportion of students use both their own library and other libraries, thus at Didsbury 99%* use their own library for reference purposes and 35% and 28% respectively use central and branch libraries. At T.A.S.C. 85% borrow from their college library, and 31% and 12% respectively borrow from central and university libraries. In a few cases the proportion of students using all kinds of library seems low, for instance, at Padgate 53% studied in their own library and only 9% and 15% respectively in central and branch libraries. Another pattern is found at Chorley where the proportion of students borrowing from their own library is not very high at 57% but the proportion of students borrowing from public libraries is almost exactly the same, resulting in an overall greater number of books being borrowed than is the case in some places where use of their own library is high, but very few students use other libraries. The bar charts below and overleaf show the proportion of staff and students using their own library at each college, and the proportion of staff and students using whichever is the second most used library. For reference and study use this is the central library in every case, except Furzedown where it is branch libraries. In the case of borrowing it is central libraries in each case, except Eaton Hall, Matlock, Didsbury, Manchester, Mather, Padgate and Furzedown where it is branch libraries. These charts show only the proportion of students using from that section of the population who were not on teaching practice.

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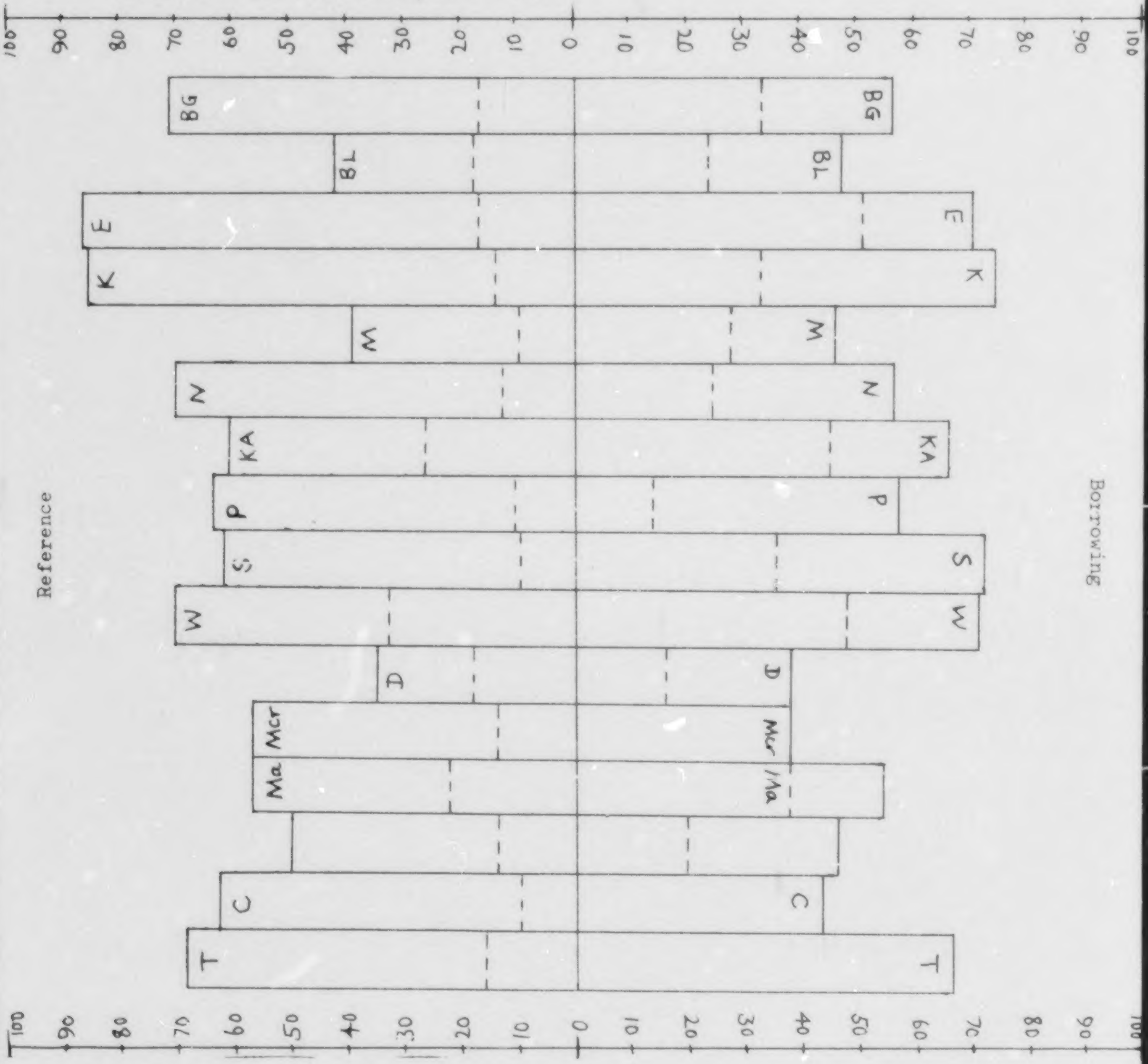
* The proportion of students using the college library at Didsbury is unlikely to be, in reality, as high as 99%. This figure has been obtained as a result of the method by which the survey was conducted, namely that forms were only handed out to people who were actually making use of the library.

TABLE 3.a

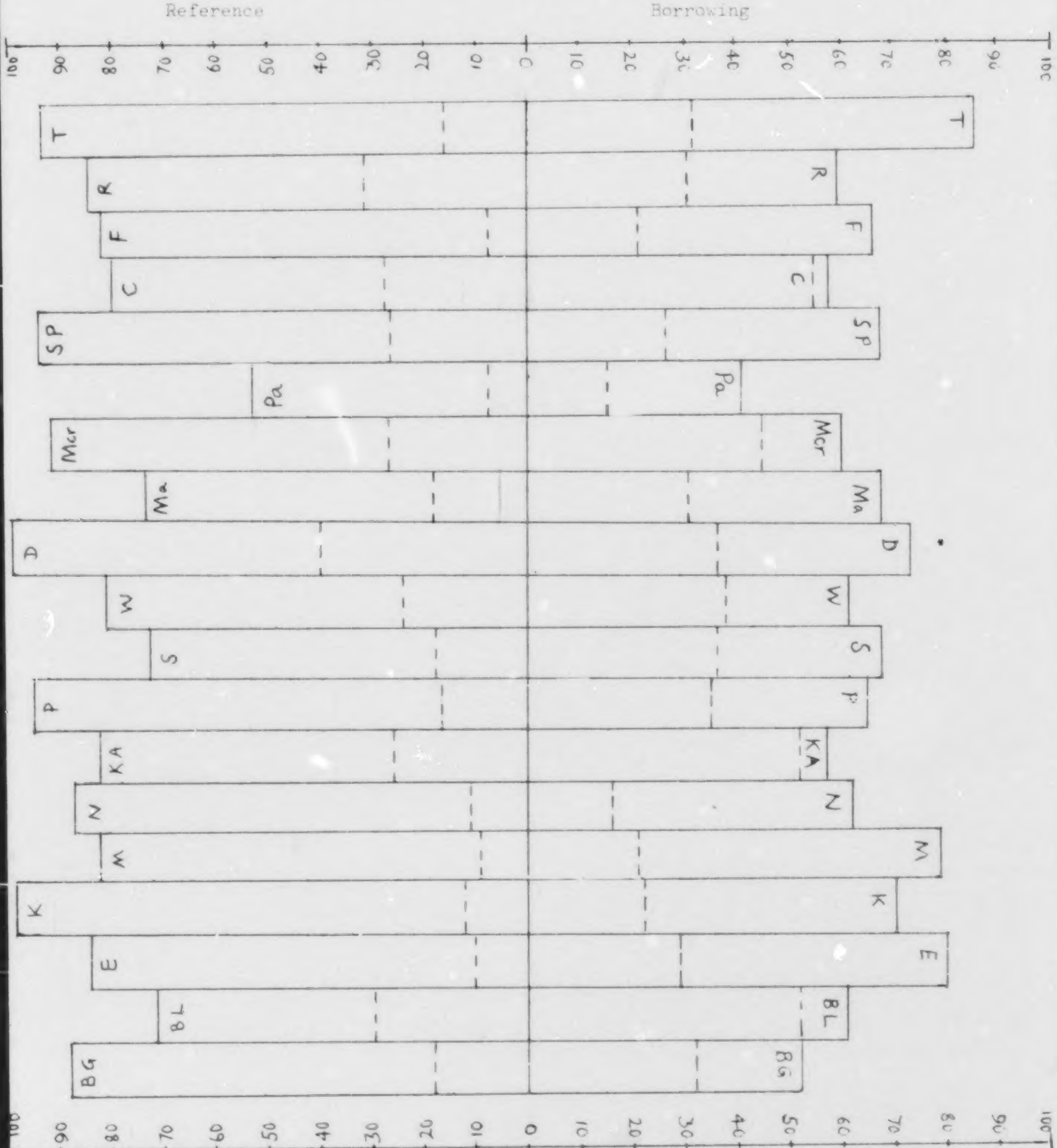
Proportion of staff using own college library, and whichever other library receives most use, during one week.



The other library most used by staff varies considerably, though it usually is a central, public or university library. For complete details, see Appendix V.A., Table 2.3.

TABLE 3.b

PROPORTION OF STUDENTS USING OWN COLLEGE LIBRARY AND CENTRAL OR BRANCH LIBRARIES, WHICHEVER IS THE GREATER, DURING ONE WEEK.



* N.B. Didsbury use of own library is inflated by the method of conducting the survey. (see Section 4.)

Top of bar is proportion of students using college libraries

Dashed line " " " " " public "

Detailed information concerning the proportion of students using each kind of library, and the proportion of students on teaching practice using libraries may be found with the information concerning the proportion of time spent and books used in Tables 2 to 2.3. in Appendix V A.

8.2 Reasons for non-use of other libraries.

Students and staff were asked to indicate on the questionnaire reasons limiting their use of other libraries. Unfortunately, the response to this was generally low. A more detailed picture could have been obtained if people had been more forthcoming. However, as can be seen from Table 4, the most usual reason for not using other libraries was concerned with the distance, cost and time involved in travelling to them. This affected both staff and students and is noticeably most applicable where the colleges are isolated.

The other common reason given is the lack of time, and this is most frequently referred to by staff. For instance, 48% of those staff at Bishop Lonsdale who answered this question stated that they had not the time to use libraries as much as they would like. As well as the information obtained from these questionnaires we have also had passed on to us from the librarians many comments from individual staff, especially those whose students were on teaching practice, referring to the difficulty they had had in using libraries during this time (See Table 4).

There is a third general reason, however, limiting such use. This arises from problems concerning the use of other libraries because of their opening hours, their regulations and the atmosphere within them, especially towards students. It was noticeable that it was mainly students who did use other libraries who made comments of this sort.

We are probably here seeing the tip of a larger problem of how far a student's use of his college library should be backed up by facilities elsewhere. Many public libraries do feel that the heavy use by students in their area militates against their providing the kind of service needed by the citizens. It would seem that it is necessary for college libraries to be fairly self sufficient. If they are isolated, students cannot reach other libraries but if they are more centrally placed, heavy use of a public library by a large number of students is likely to create bad feeling in the community where the library is situated. Nonetheless, it remains evident that students doing specialised topics and staff doing research must have access to the facilities of public as well as university libraries. It is regrettable that so many potential users find themselves deprived of access to materials they need in other academic libraries because of such regulations and an investigation into satisfactory cooperative methods in this area would seem to be called for. It is hoped that the project at present in progress at Sheffield postgraduate School of Librarianship concerning library cooperation will help in this matter.

Some interesting supplementary information is available in other recent surveys. A survey carried out in December 1971 in four colleges of another ATO found that in one college 15% of the students claimed to use other libraries frequently, 27% often, and 17% had never used them. In the second college 7% of the students claimed to use other libraries regularly, 28% often and 6% never. In the third college, the figures were, regular use 34%; frequent use 34%; no use 8%. In the fourth college, regular use 51%; frequent use 36%, no use only 1%.

In a survey carried out in a city college about a year earlier, 34% of the students said they frequented other libraries regularly and only 4% never.

TABLE 4. REASONS LIMITING USE OF OTHER LIBRARIES - STUDENTS.

	B.G.	B.L.	E.	K.	M.	N.	K.A.	P.	S.	W
Total *	100 (22)	100 (29)	100 (52)	100 (38)	100 (26)	100 (37)	100 (160)	100 (36)	100 (23)	100 (18)
Distance	27	45	43	55	46	40	25	36	30	56
Library problems	36	34	26	21	38	10	19	22	35	17
Time factors	14	3	19	5	8	5	37	33	17	6
Ignorance	5	14	7	8	0	3	0	0	9	0
Adequacy of college library	18	3	4	10	8	32	12	8	9	17
Buy own books	0	0	0	0	0	3	6	0	0	6

* Total is total number of reasons given and is therefore more than the total number of students replying to this question as some may have given more than one reason.

	D.	Mcr.	Ma	Pa.	S.P.	C.	F.	R.	T.
	100 (127)	100 (30)	100 (16)	100 (5)	100 (15)	100 (33)	100 (8)	100 (59)	100 (35)
Distance	48	27	6	60	27	36	25	24	46
Library problems	30	43	31	20	33	36	37	50	14
Time factors	6	23	44	20	13	22	0	18	23
Ignorance	2	0	0	0	13	0	37	4	0
Adequacy of college library	12	7	19	0	13	6	0	4	17
Buy own books	2	0	0	0	0	0	0	0	0

In all colleges except Furzedown and Mather distance is given as either the 1st or 2nd most usual reason.
In all colleges except K. Alfred's, Nottingham, T.A.S.C., and Portsmouth problems in using other libraries is given as 2nd or 1st most usual reason. Buying own books is given as a reason in only 4 colleges. A few students in most colleges mentioned the adequacy of their own library,

TABLE 4.1 REASONS LIMITING USE OF OTHER LIBRARIES - STAFF

	B.G.	B.L.	E	K	M	N	K.A.	P
	100 (12)	100 (25)	100 (17)	100 (23)	100 (26)	100 (15)	100 (29)	100 (8)
Distance	75	40	41	61	54	27	32	0
Library problems	8	9	18	22	38	53	11	50
Time factors	17	48	18	4	4	20	39	50
Adequacy of college library	0	4	23	4	4	0	11	0
Buy own books	. 0	4	0	9	0	0	7	0

	S.M.	W	D	Mcr.	Ma.	S.P.	C	T
	100 (3)	100 (21)	100 (25)	100 (8)	100 (8)	100 (11)	100 (20)	100 (25)
Distance	100	71	24	0	12	2	45	36
Library problems	0	10	8	80	38	0	35	24
Time factors	0	19	44	20	25	1	10	36
Adequacy of college library	0	0	8	0	25	0	10	4
Buy own books	0	0	16	0	0	0	0	0

Of these students 75% said that they sometimes used other libraries because of the inadequacy of the college library stock. The A.T.O. survey also asked students about recreational reading. Their often stated need for better provision of more recreational reading matter in the college library suggests that quite a high proportion of borrowing from public libraries is for recreational reading. However, in one of these colleges the branch library was only one mile away but only 48% of the students ever used it. Yet the central library was ten miles away but 53% of the students sometimes used it. This suggests that it is study material which is being used on these occasions and some students take considerable trouble to obtain it. In the same college, 19% said they had used the Institute Library at least at some time as against 9%, 11% and 31% in the other three colleges surveyed. It is, of course, not possible to know what students mean by frequent or regular use. The Librarian of one of these colleges noted that some students apparently did not even know the name of their main subject course, so that it would not be surprising if they did not know what an Institute of Education was, thereby implying that the figures may be inaccurate.

These same students were also asked how often they used the library for borrowing and how often they used it for studying. It is interesting to note that, unlike most of the libraries in our survey, more students said they borrowed books from the library, at least once a week, than those who stated they used it that frequently for study purposes. Thus, in the four colleges concerned 78%, 71%, 57% and 64% respectively stated that they borrowed at least once a week. Only 41%, 50%, 55% and 46% respectively said that they studied there at least once a week. In the last of these colleges there seemed to be a definite fall off in both borrowing and studying in the library between the first, second and third years, although there was no fall off in the use of other libraries. It is noticeable also that there were more complaints by students in the later years concerning difficulties in finding the material they needed. This might be taken to suggest that lack of use of the college library results from frequent failure to find the material required, and so lack of use could indicate inadequacy of provision. Moreover, two of these colleges with a high rate of borrowing had satisfactory study-bedroom accommodation near the library where students preferred to work. At the city college library mentioned above, there was also a much higher percentage of use for borrowing than for study. These students were asked where they preferred to study and most of them expressed a strong dislike for working in the library, some because of noise, others because they did not like the atmosphere. Again, there was a preference for working in their own study-bedrooms. It was noticeable that day students made more use of the library for study than did the residential students.

A survey recently carried out in Bath public libraries to investigate the use made of them included students from a general college of education. About one third of the students were included in the sample, but the response rates, especially in the third year, were rather poor. The result is that a high proportion of the respondents were students who made above average use of libraries. This must be kept in mind when the data in the Bath survey is considered. About three quarters of the students borrowed one book per week from the college library, and rather more found that most of the books they needed were available in their own library. Their use of public libraries as another source of materials seems to be about equal to their use of bookshops and friends. However, not many students actually bought books. Three quarters did claim that they used the public libraries, over half of them saying that they used them for reference and consultation, and about half saying they borrowed from them. Only about one-third said they borrowed from them for recreational and background purposes. This is interesting evidence suggesting that the large amount of public library use is not necessarily just recreation reading but is connected with their studies. The use in any particular week could have been low but this college must be considered an isolated one as it is four miles from the nearest public library and a mile walk to the nearest bus stop. They also complained of the inadequate book stock of the public library in connection with their special needs. It would seem that, in the case of this college, their own library was adequate and the public library did not figure heavily in their use. It is worth noticing, however, the writer's reasons for including students in this survey. He states that the often heard cry that students are abusing public libraries and overwhelming their facilities, particularly by their influx into reference libraries makes it important enough to study the dependence of students on public libraries. Other types of college in the Bath area seem to be making heavier use than the one just referred to, and we have seen that, in other areas, college of education students do make quite heavy use of public libraries. The significance of this situation needs to be considered.

9. Internal:external use ratio.

So far we have only considered proportions of people using different types of libraries, and time spent and books used. It is, however, also interesting to see how the proportions of time spent on each kind of activity vary between one set of college students and another, and between one kind of library and another. We decided to look at these differences in three different ways. Firstly, we investigated the proportions of time spent on reference and study, browsing and borrowing, and books used for reference and borrowing for all types of libraries together. Secondly we considered the same factors but looked only at those figures relating to the use by students and staff in their own library. Thirdly the same method was used to investigate the proportions as they apply to use of other libraries.

Where the proportions of time spent are concerned, certain problems resulting from difference in interpretation present themselves. As we have already mentioned there is confusion arising from the use of the terms 'browsing' and 'borrowing' and from the fact that, in some cases, definitions of these terms were given but in others they were not. This difficulty obviously affects the proportionate figure for these two activities. Because of the peculiar situation at Didsbury, it is, in fact, not possible to show proportions of the three activities when considering use in all types of library together.

These problems do not arise, however, when we are considering the proportion of books used for study in comparison with those used for borrowing. This is perhaps the most interesting comparison since internal:external use ratios can often be used as helpful pointers to indicate hidden library exploitation. This is because most libraries do, or can keep issue statistics, and could investigate the use made of each book, especially when most of the library's stock is on open access, by examining the date stamp or book card. However, it is usually considered very difficult to estimate with any reasonable accuracy use made of books internally. The proportions relating to students' book use have therefore been turned into internal:external ratios, and are shown in Tables 5 and 5.1.

The actual proportions pertaining in each college, for both book use and time spent are available as percentages in Table 5 in appendix V.A.

Unfortunately there still remains the problem of interpreting these ratios. We can be reasonably sure that a student indicating a book borrowed refers to a book owned by the library in question, and on issue to (or illicitly borrowed by) that student. What we cannot be so sure of is that a student indicating a book referred to is talking about a book from the college library stock, but not on issue, or whether he means a book which is already on loan to him from that library, from another library, or from a friend, or indeed whether it is a book owned by himself. An attempt was made at Didsbury to investigate what proportion of all the books being used for study did belong to each of these categories. However, only a small proportion of the students who were surveyed were asked for this information, and the results therefore are not reliable. None the less they suggest that between one third and one half of the books studied were either already on loan to the student or were from elsewhere than the college library. Since there is some evidence from the diary forms from other colleges to suppose that some students who were using books from elsewhere did not include them in their totals the lower figure of one third of recorded books is perhaps acceptable.

There is also further information available from other investigations carried out during this project which have been described elsewhere in this report. For example, three of the colleges where surveys of use were carried out also took part in a failure survey, as did one other college. In the failure survey students were asked how many library books they had looked at during their visit and how many of these they had borrowed. From their replies, it is possible to obtain internal:external use measures. In many cases, the internal figure has been inflated to include books which were used for browsing only. In one college students were interviewed at random times in the library in the hope if discovering the source of books they were using at the time. Unfortunately it was found that this direct method caused undue disturbance to the same small minority of students who seemed to be at work at the times the research worker made her rounds. However, from the little information that was gleaned, a picture of rather less internal use than had been expected was found, if one takes internal use to refer only to the use of books which are neither on issue nor which are going to be borrowed by the student at the end of the visit investigated. Yet it is possible to argue that this is not a reasonable division. If students are using in the library books which they have borrowed or which they intend to borrow at the end of that visit a measure of this use is necessary if our interest is in ascertaining space and seating needs for students working in our libraries. But if our reason for obtaining internal:external use ratios is in order to ascertain how much use the materials are receiving, apart from that recorded by issue statistics, then these ratios as they stand at the moment will certainly inflate such use. Also it is often argued that heavy use of books internally in relation to use of books which have been borrowed leads to more efficient exploitation of the library stock. If a student borrows a book it will only be available to that person and possibly his friends for the total time that he has it out. But other people may be wanting it during that time, and when they are wanting it it may be sitting idle on that student's shelves. If the student had used the book only when he required it in the library, it would have been available for other people to use in the intervening periods. Evidently then, if we wish to ascertain how far this advantage is being gained in a library it will be revealed by a high internal:external use, and again we must have ratios which only include in the internal figure, library books not on issue to a student, since if they are on issue the fact that he happens to be using them on library premises does not increase their availability to other students. It is for such

TABLE 5.

INTERNAL : EXTERNAL USE RATIOS

Students' use of books in other libraries

The following colleges' students make considerable reference use of materials in other libraries, using more books than they borrow:

Leeds	2 : 1
Kesteven	3 : 2
Sedgley Park	3 : 2

Or using as many as they borrow:

Matlook	1 : 1
Nottingham	
Chorley	
Didsbury	
Redland	
Mather	
Sedgley Park	

The remainder study less than they borrow, with ratios varying from:

Manchester	2 : 3
Weymouth	
Portsmouth	1 : 2
Sarum	
K.Alfred's	
Padgate	
Bishop Grosseteste	
Eaton Hall	
Bishop Lonsdale	
Manchester(inc. T.P.)	
Furzedown	1 : 3

Students' use of books in their own libraries.

In most college libraries more books are used internally than are borrowed. In some a lot more:-

Nottingham	4 : 1
Sedgeley Park(inc.T.P)	
Bishop Grosseteste	
Mather (exc.T.P.)	
Bishop Lonsdale	3 : 1
Padgate	
Sedgley Park (exc.T.P)	
Mather (incl.T.P.	
Redland	
Leeds	

Most have a reasonably high internal external ratio:

Kesteven	7 : 3
Matlock	
Didsbury	
Portsmouth	
K.Alfred's	
Chorley	
Sarum	2 : 1
Weymouth	
Eaton Hall	4 : 3

Only in one college do students borrow as many as they refer to:

Manchester	1 : 1

and only in one do they borrow more than they refer to:

Furzedown	3 : 4

Students on T.P. use libraries in rather a different way

Internal:external use of ratios for Students on T.P.

Other libraries

Sedgley Park	9 : 1 (almost certainly inacc. very small sample)
Portsmouth	3 : 1
Manchester	1 : 1
Mather	
Weymouth	2 : 3
Bishop Lonsdale	1 : 2
Nottingham	1 : 2

Their own library

Sedgley Park	9 : 1
Portsmouth	4 : 1
Bishop Lonsdale	3 : 1
Mather	7 : 3
Nottingham	1 : 1
Weymouth	
Manchester	2 : 3

N.B. 1st figure is always the internal use figure.

TABLE 5.1.

STAFF USE

Similar variations can be found in Staff use.

Other libraries

Only in one case are more books studied than borrowed and then only just.

Portsmouth	4 : 3

In many cases as many are borrowed as studied

K.Alfred's	1 : 1
Didsbury	
Kesteven	
Chorley	

in some cases there are fractionally more borrowed than studied

Sarum	3 : 4
Sedgley Park	
Bishop Lonsdale	
Bishop Grosseteste	2 : 3
Manchester	
Matlock	

In the remainder of colleges staff borrow much more than they study in other libraries

Eaton Hall	1 : 2
Weymouth	3 : 7
Mather	3 : 7
Nottingham	1 : 4

Own libraries

There are no cases where staff have very high internal : external use ratios although some are fairly so:

Nottingham	3 : 1
Manchester	
Weymouth	
Bishop Grosseteste	2 : 1
Bishop Lonsdale	
Eaton Hall	
Kesteven	
Portsmouth	
Sarum	
Chorley	

The rest are all equal or nearly so

Sedgley Park	3 : 2
K.Alfred's	4 : 3
Didsbury	
Mather	
Matlock	1 : 1

Actual percentages of internal to external use and percentages of time spent on each activity are in Appendix V.A., Table 5.

reasons that we must seek a method of obtaining more precise internal:external use ratios than we have at present. These are useful for comparative purposes, in that it is possible to see whether one's own library has a higher internal rate in relation to other libraries, whatever the rates include.

It is necessary to try to find the factors which influence students to use books in the library rather than to borrow them. Some of these will be the comfort and space available in the library, the likelihood of their finding books on the shelf when they need them, sufficient gaps in their timetables during the day to enable them to work in the library, and a library building situated conveniently near to the other college buildings. These factors, to a greater or lesser extent, may be within the librarian's sphere of influence. Other influences are harder to control and must probably be accepted as inevitable constraints, for example, patterns of residence, age and maturity, family commitments, long travelling journeys, etc. From a comparison of the information in Tables 1b and 5, it is possible to see the extent to which some of these factors have affected use. For example, Chorley and Manchester are mature students' colleges, and their internal use is affected accordingly.

10. Vacation Use.

The questionnaires included a section asking staff and students to record their use of the different types of library during the vacation. With the exception of Padgate, Furzedown and Didsbury, however, the vacation concerned was the summer vacation, and yet the survey did not take place until the following November. It is, therefore, reasonable to assume that both staff and students had considerable difficulty in remembering with any accuracy the type of use they had made of libraries during the vacation. They were asked, in most cases, to indicate this use as a fraction, i.e. their total use under each heading, divided by the number of weeks in the vacation. The intention was to obtain an average per week of each library type. Some students did indicate their use in this manner, many did not and, in the latter case, it was not possible to tell whether the figure given was the figure for total vacation use or whether it was a figure of one particular or one average week during the previous vacation. Because of these problems, it was finally decided not to use any of the times given or numbers of books used recorded on these forms. However, it was felt that the one thing of which we could be sure was that if some amount of use was recorded in a particular column it was reasonable to suppose that the user had used that kind of library at least once during the previous vacation. Therefore it has been possible to compile tables showing the proportion of students who used each type of library during the vacation. Although the Didsbury survey took place at a different time, and both students and staff were specifically asked to record their use during one week, it is more than likely that their total use was, in fact, recorded. Again, the only way in which these figures have been used has been to show the proportion of students using each library type.

At Padgate and Furzedown, however, the questionnaire took place soon after the Christmas vacation, and, on this occasion, respondents were asked to record their total library use during that previous vacation. As it was a much shorter vacation they were more likely to remember with accuracy, and the problem of asking first year students about a summer vacation which they could not have spent as college students was avoided. These two colleges were also asked to indicate any use they had made of their own library in the vacation. The full results have, therefore, been used and presented in the same form as the tables used earlier to show use made of libraries during a week in term time. It should, however, be remembered that these tables do not represent the use in one week in the vacation, but the use of libraries during the whole of that vacation.

As is to be expected, a large number of students use public libraries during vacation, especially for borrowing purposes. There is light use of other kinds of libraries by students from most colleges. A brief analysis of this information follows. More detailed information of the proportions of each group of students using these libraries, and the proportions of staff using libraries from some of the colleges investigated can be found in Table 6, Appendix V A.

Vacation Reference Use	Central Libraries
30% +	Weymouth
	Furzedown
	Didsbury
	K. Alfred's
	Matlock
	B.Lonsdale
less than 20%	Padgate
	T.A.S.C.
	Bristol

In the other colleges, between 20% and 30% of the students used central libraries.

Vacation Reference Use	Branch Libraries
20% +	Mather
	Furzedown
	Eaton Hall
	Weymouth
	Didsbury
less than 10%	B. Lonsdale
	T.A.S.C.

In the other colleges, between 10% and 20% of the students used branch libraries.

There was a little use of university or institute libraries everywhere save Portsmouth and Manchester, and a little use of various other types of library everywhere save by K. Alfred's.

Vacation Borrowing Use	Central Libraries
40% +	All except -
30% - 40%	Eaton Hall
	Kesteven
	Padgate
	Sedgley Park
20% - 30%	Mather
	Padgate
	T.A.S.C.
less than 20%	Furzedown

Vacation Borrowing Use	Branch Libraries
40% +	Manchester
	Matlock
	Mather
	Redland
30% +	B. Grosseteste
	Nottingham
	K. Alfred's
	Sedgley Park
	Weymouth
	Didsbury
	Sarum St.M.

All the rest 20% - 30%, save Leeds where 15% used.

Some use of university or institution libraries was made by students from all colleges except B.Lonsdale and Matlock.
Some use of other types of library was made by students from all colleges except Padgate, Didsbury and Sedgley Park.

Below are the more detailed tables of information for Padgate and Furzedown. It will be noticed that the amount of use of college library is, in both cases, very slight. It should be noted that the heavy use of other colleges recorded at Furzedown for reference purposes was attributable to one student !

On average Furzedown students spend about one hour studying in libraries during the vacations, and Padgate students about one and a quarter hours. Padgate students borrowed on average 2.5 books and Furzedown students three. About one quarter of the students made some use of libraries, mainly public, during the Christmas vacation.

The staff and students were also asked to indicate their reasons for making a limited amount of use of other libraries during vacations, in the same way as they had been asked to record this for their use of other libraries during term time. From Table 6, it can be seen that for the students, distance is still a major factor limiting vacation use during vacations, but now inadequacies of other libraries and difficulties in their use are as important. For staff distance is still most important in many cases, but family commitments, holidays and library regulations also often play a major part. The overall impression gained from the comments of these staff and students is that many parts of the country are still very isolated from good library facilities and that the short length of loan periods and number of books allowed in most public libraries create difficulties for the kind of use of materials which many students wish to make. Staff seem particularly hampered during vacations by problems attendant on the use of many university libraries' materials. There were also quite a large number of staff and students who stated that they either owned the books they needed for vacation use or borrowed sufficient for their needs from their own college library prior to the commencement of the vacation. It should, of course, be borne in mind when reading these tables that the response rate was very low, as was the case with the same question concerning term-time use.

PADGATE

	REFERENCE			BROWSING	BORROWING		
	Mins.	Books	Students	Mins.	Mins.	Books	Students
	100	100	100	100	100	100	100
Total	(7070)	(102)	(80)	(1890)	(664)	(203)	(80)
College	2	1	1	3	2	3	3
Central	60	42	19	55	44	39	24
Branch	16	34	11	40	51	53	26
University	*	*	*	*	*	*	*
Institute	8	8	1	2	4	4	1
Other colls.	14	15	3	*	*	*	*
Other	*	*	*	*	*	*	*

FURZEDOWN

	REFERENCE			BROWSING	BORROWING		
	Mins.	Books	Students	Mins.	Mins.	Books	Students
	100	100	100	100	100	100	100
Total	(5130)	(105)	(70)	(2261)	(481)	(223)	(70)
College	*	*	*	1	1	3	1
Central	28	38	11	28	35	27	16
Branch	19	25	10	68	60	66	29
University	[illegible]	2	1	1	*	*	*
Institute	*	*	*	*	2	*	1
Other colls.	41	11	1	*	1	1	1
Other	11	24	3	2	1	3	3

The total number of students shown is the number of those sampled who responded. Some used several libraries, many used more. Therefore, the totals in the "students" columns will not add up to 100.

TABLE 6. REASONS LIMITING USE: VACATION

STUDENTS

	B.G.	Kesteven	Eaton Hall	Matlock	Nottingham	K.Alfred's	Portsmouth
	100	100	100	100	100	100	100
T.	(35)	(29)	(50)	(18)	(45)	(22)	(29)
1.	39	28	34	50	53	54	52
2.	34	44	48	50	33	23	41
3.	27	28	18		13	23	7

	Sarum St.M	Weymouth	Didsbury	Manchester	Mather	Sedgley P.	T.A.S.C.
T.	(22)	(27)	(94)	(18)	(19)	(9)	(22)
1.	32	26	66	33	32	78	27
2.	64	63	30	33	47	22	54
3.	4	11	1	33	21		18
4.			3				

Distance is still a major factor during vacations but now inadequacies or difficulties in use of other libraries are as important.

STAFF

	B.G.	Kesteven	Eaton Hall	Matlock	Nottingham	K.Alfred's	Portsmouth
	100	100	100	100	100	100	100
T.	(16)	(14)	(12)	(23)	(7)	(9)	(9)
1.	75	86	50	61	57	67	45
2.	13	14	42	39	43	11	22
3.	6		8			22	33
4.	6						

	Sarum St.M.	Weymouth	Didsbury	Manchester	Mather	Sedgley P.	T.A.S.C.
T.		(14)	(6)	(3)	(8)	(4)	(13)
1.		100	33		45	75	31
2.			33	67	22	25	15
3.			33	33	22		54

Distance is still most important in many cases, but family commitments, holidays, and library regulations also often play a major part.

T. Total

1. Distance.

2. Library problems, regulations and stock inadequacies.

3. Time factors including holidays and family commitments.

4. Other factors including ignorance, own books, borrow sufficient in term time.

11. Students' use of their own library.

We have until now considered mainly the proportion of one type of use in relation to another, and in comparison between colleges. The librarian is also likely to be interested in the amount of actual use being made of his own stock, in comparison with the amount of use being made elsewhere. As has already been indicated, in discussing the proportions of students using a particular library, the fact that a high proportion of students' total use takes place in a particular college library does not necessarily mean that the students at that college spend more time in their own library than do those where a smaller proportion of the total time is spent there. The total time, of which these proportions are a part, may be greater in the latter than in the former case. In Tables 2 to 2.4 in the Appendix the raw scores, which are the total time in each activity are shown above the proportions. The number of students replying to the survey in each college varies, however, and so it is difficult for the reader to see easily how much use per student is suggested by these totals, and how the colleges compare quantitatively with one another, since the totals were recorded by different numbers of people in each case

In addition to this, we have already discussed the problem of the accuracy of these returns, and it will be noted that some colleges seem to have acquired more accurate a response than others. The following Table 7 shows the average time spent studying by students in each college and the average number of books used by the same students, corrected, as far as is possible, by means of a factor obtained from the inaccuracy percentage suggested by the issue statistics check referred to in Section 4. These times have been put in broad bands, partly because it is easier to understand and partly because some of the remaining inaccuracies are likely to have been removed by this method. Most people when indicating time spent on an activity are apt to record their time to the nearest quarter of an hour. In other words, a student studying in the library for twenty minutes may well indicate that he was there for half an hour. If his visit is then placed in a band reading fifteen to thirty minutes his exaggeration will be ameliorated. Inaccuracy percentages and overall raw score averages can be found in Tables 3 and 5 in Appendix V.A.

12. Influences on use of own library.

Some librarians have suggested that the pattern of student use, and the amount of use they make of their library is affected by the staffs' attitude to library use. If by this we mean that in a college where the staff make heavy use of libraries the students will do likewise, investigation of these figures has shown no correlation. None the less, the Nottingham A.T.O. figures for total use of libraries, not just use of own college library, indicate some slight evidence of correlation between high student and high staff use.

Other influences on the staff and students affecting the amount of use they make of the college library fall into three categories. First are those concerning the student as a private individual; these include his own personal responsibilities outside college as well as his attitude towards his work, his general ability, and his willingness to purchase materials. Obviously the librarian has no direct control over these. None the less, he may be able to influence them by successful education in library use and a welcoming attitude, where an individual's lack of commitment is due to previously experienced difficulties in coping with libraries and understanding their use. Secondly use is affected by college organisation factors, such as the layout of the college buildings, how heavily students are time-tabled during the day, the type of

TABLE 7.

AVERAGE TIME SPENT STUDYING PER WEEK IN THE COLLEGE LIBRARY (EXCLUDING STUDENTS ON T.P.)

Students including non-users	Staff including non-users	Students excluding non-users	Staff excluding non-users
More than 4 hours			
Kesteven		Kesteven Nottingham T.A.S.C. Padgate	
3 - 4 hours			
Nottingham T.A.S.C. Didsbury Redland		Didsbury Redland B.Grosseteste Matlock	
2 - 3 hours			
Matlock B.Grosseteste Eaton Hall Padgate Sedgley Park		Eaton Hall Sedgley Park Weymouth	
1 - 2 hours			
Weymouth B.Lonsdale Portsmouth Sarum St.M. Mather Chorley K. Alfred's	Kesteven T.A.S.C.	B.Lonsdale Portsmouth Sarum St.M. Mather Chorley K. Alfred's Furzedown	Kesteven B. Lonsdale* T.A.S.C. Didsbury
30 - 60 mins.			
Furzedown Manchester	B.Lonsdale Nottingham Portsmouth Chorley	Manchester	B.Grosseteste Eaton Hall Nottingham K. Alfred's Portsmouth Sarum St.M. Manchester Mather Sedgley Park Chorley
15 - 30 mins.			
	B.Grosseteste Eaton Hall Weymouth Didsbury Sarum St.M. K.Alfred's Manchester Mather Sedgley Park		Matlock Weymouth
less than 15 mins.			
	Matlock		

TABLE 7.1. AVERAGE NUMBER OF BOOKS USED PER WEEK IN THE COLLEGE LIBRARY

All students (except those on T.P)		All students (excluding non-users.)	
Reference	Borrowing	Reference	Borrowing
6 or more books		6 or more books	
B. Grosseteste		B. Grosseteste	
Eaton Hall		Eaton Hall	
Didsbury		Nottingham	
T.A.S.C.		Didsbury	
		Redland	
		T.A.S.C.	
4 - 5 books			
Kesteven	Eaton Hall	B. Lonsdale	Eaton Hall
Matlock		Kesteven	Kesteven
Nottingham		Matlock	Weymouth
Weymouth		Weymouth	
Sedgley P.		Chorley	
Redland		Padgate	
		Sedgley P.	
2 - 3 books			
B. Lonsdale	B. Grosseteste	K. Alfred's	B. Grosseteste
K. Alfred's	Kesteven	Portsmouth	Matlock
Portsmouth	Matlock	Sarum St.M.	Nottingham
Sarum St.M.	Portsmouth	Manchester	K. Alfred's
Manchester	Sarum St. M.	Mather	Portsmouth
Mather	K. Alfred's	Furzedown	Sarum St.M.
Padgate	Didsbury		Didsbury
Chorley	Furzedown		Padgate
Furzedown	Redland		Sedgley P.
	T.A.S.C.		Chorley
			Furzedown
			Redland
			T.A.S.C.
less than 2 books			
	B. Lonsdale		B. Lonsdale
	Nottingham		Matlock
	K. Alfred's		Mather
	Manchester		
	Mather		
	Padgate		
	Sedgley P.		
	Chorley		

TABLE 7.2. AVERAGE NUMBER OF BOOKS USED PER WEEK IN THE COLLEGE LIBRARY

All Staff		Staff (excluding non-users)	
Reference	Borrowing	Reference	Borrowing
4 or more books		4 or more books	
Kesteven Portsmouth T.A.S.C.		B. Lonsdale Kesteven Nottingham Portsmouth Sarum St. M. Didsbury Manchester Mather Sedgley P. T.A.S.C.	
2 - 3 books			
Eaton Hall Sarum St.M. Manchester B.Grosseteste B.Lonsdale Nottingham K. Alfred's Weymouth Didsbury Mather Sedgley P. Chorley	Kesteven Eaton Hall K. Alfred's Portsmouth Sarum St.M. Mather T.A.S.C.	Eaton Hall Matlock K. Alfred's Weymouth Chorley	All colleges except ↓
less than 2 books			
Matlock	B.Grosseteste B.Lonsdale Matlock Nottingham Weymouth Didsbury Manchester Sedgley P. Chorley		Weymouth

courses offered (examination or assignment based), and the emphasis placed on private study. These, again, are not matters over which a librarian has direct control; although if he is an academic member of the staff with access to committees who plan courses and make policies, he may be able to offer to the rest of the staff information concerning the use that can be made of libraries, and which may, in some way, influence their decisions. Thirdly, there are factors which are directly related to the library itself. These include adequacy of the library's stock, the atmosphere of the library, and the ease with which the students can find their way around, etc. They may also include the layout and siting of the library, and the extent to which all the materials, whether books or other media, are available in the library, or are partially to be found within other departments of college. Proliferation of this kind means that although use of the materials may be as great, it will not be possible for the librarian himself to quantify total use, because it will be scattered. There may also, in some cases, be a problem of access to material which may actually hinder use. Many of these matters are within the direct control of the librarian and his staff. Others, while they are in the control of the college administration and academic staff as a whole, are of obvious direct importance to the librarian, and he may well, therefore, be in a position to bring some influence to bear.

It is, of course, difficult to know which, if any, of these factors affected use in particular cases. If the information concerning the colleges and their situation is compared with the results obtained from the tables, some idea of possible effects can be gleaned however. For example, it is noticeable that there is high average use in the Nottingham colleges. The courses are mainly internally assessed and there is emphasis on continuous individual study by students. The very high figure at Kesteven is also partly because of the library's geographical situation in relation to other buildings. Bishop Lonsdale college which appears to have lower use, has, in fact, got two libraries, one in the old site where a few departments are still situated, and one on the new site. It also has a few departmental collections. It does not follow that students there make less use of materials overall, but as their use is scattered in this way they will obviously be making less use of the library itself. The survey forms almost certainly recorded use taking place mainly on the new site and it is most unlikely that students recorded use of departmental libraries. At this college the situation is likely to change considerably in the near future. A new purpose-built library is being built and this will alleviate the other factor depressing use, namely cramped conditions in the existing building. Some of the departments still on the old site will shortly be moving to the main campus. It does not necessarily follow that use of the library will automatically increase immediately. It may, initially, remain depressed while students grow accustomed to its new siting and "find" the new building. An example of this factor can be seen in Padgate's lower than expected average. But this has probably also been affected by the shorter opening hours at the time of the survey (necessitated by the power workers' strike). The dual effect of mature students having heavy commitments elsewhere, and heavy time-tabling during the day can be seen in the figures for Manchester college of education. Similar connections can be made by the reader.

PROBABILITY MODELS AND STUDENTS' USE OF THEIR OWN LIBRARY.

13. Introduction and Methodology

We have already seen some of the difficulties resulting from investigating students' use of the libraries by means of averages. These arise not only from the accuracy of the data obtained, but also from differences in use between different groups of students in a college. To take an extreme case as an example, let us suppose there are two groups of students at one college. Those in the first group visit the library several times a week and often stay two or three hours, spending, on average, eight hours a week each in the library. Those in the second group are very infrequent library users, making very sporadic visits of a few minutes, averaging about five minutes per student per week. If the two groups were analysed as one, and they were the same size, an average of four hours use would be obtained. Such a figure would be completely atypical of the use patterns pertaining at that college. It would be more useful to know that there were two groups with these two different patterns of use.

Our problem, then, is to discover whether there are groups with calculable patterns of use within our colleges of education. If there are, we will be able to predict the proportion of students who are likely to make various levels of use over any given period. If we cannot find groups which act in a similar kind of way, such predictions will not be possible.

The possible ways in which students might group as regards library use seem to be by year group, by subject, by level of course taken, i.e. Certificate of Education, B.Ed., graduate, or by pattern of residence. Unfortunately, it has not been possible to investigate subject groupings. Within each college the samples have been too small to produce viable numbers in subject groups, in many cases there being only two or three students in a group. Neither have we been able to investigate the effect on student grouping of their place of residence. This information was not readily available. We have therefore confined ourselves to groupings according to year and level of course.

Maurice Line in his survey of Southampton College of Education Libraries did endeavour to investigate the other possible groupings, and also the question of whether the sex of the students affected their library use. He also was hampered by the very small samples in each group, in many cases particularly where subject groupings were concerned, and was only rarely able to show definite evidence of patterns of use resulting from different groupings of this sort.

We decided to investigate this question by the use of probability models. This method has the advantage of showing us when we have found a group, at the same time that it enables us to obtain a measure of use by that group. This saves the need of further calculation and also means that if two groups are investigated separately, but in fact could have been put together as a single group where library use is concerned, the models will show this up because the pattern of use predicted in each case will be similar.

The method referred to involves grouping the students' scores into suitable frequencies, and then calculating cumulative frequencies for this type of use. (See example 1, Table 8.1 Appendix V A) These points are then plotted on semi-logarithmic paper. (See example 2 Table 8.1 Appendix V A) If the points lie on or near a straight line, then the scores obtained are from a homogeneous group for this type of library use. To confirm the visual impression obtained from looking at these plotted points in relation to a straight line, Chi squared tests have been used to reveal goodness of fit.

These models were used to investigate the following types of library use - borrowing books, using books in the library and time spent in the library per visit. For two reasons it was considered more useful to ascertain the length of visits in general rather than length of visit for any particular purpose. Firstly, such information is of more obvious use to the librarian, in that he needs to know how long people are spending in his library. This affects the kind of seating and space he should provide, and secondly because some idea of the type and purpose of the visit can be ascertained anyway from the length of time spent. Obviously anyone visiting the library for fifteen minutes only is not likely to be going to do much study on that occasion, whereas someone spending two hours in the library, we would hope, had not just come to borrow a book. The information available on the length of visits is likely to be more accurate because each student had, in effect, to record this twice on his diaries, once when he indicated the time he spent on various activities in the library, and again when he indicated the times at which he entered and left the library.

Since many students surveyed paid several visits to the library during the week in question, the total number of visits made is considerably larger than the number of students sampled, thus giving us a bigger sample to investigate. This also applies to books borrowed and books studied but it was decided that an investigation of the use of books per visit was less useful than evidence relating to the books used per week. It was generally found that only one homogenous group within a college could be found for use of books, in other words all the students in the college apparently act in the same sort of way, whereas where length of visits was concerned, two or three different groups were found, according to the year the student was in. It is, of course, possible that these extra groups were found as a result of the greater amount of data available, and that differences in years were masked, where book use is concerned, through lack of data. Further investigations are needed to validate or falsify this assumption.

We have already remarked on the exaggeration in these surveys as a result of non-responders being non-users. Where length of visits is concerned this problem need not worry us. We are saying, in effect, that of all the visits which took place so many lasted a certain length of time. The question of how many visits in fact took place is rather a different matter. So far we have only investigated this by grouping together the data available, according to the groups found for length of visits and finding an average number of visits per student in that group. Ideally it would be useful if, at a later date, probability models were also used to investigate patterns of visits made.

Where use of books is concerned we need to know what proportion of students do not use any books, as well as the proportion using, one, two, three, four, etc. books, and our chances of finding this are complicated by the levels of inaccuracy we have earlier referred to. Where borrowing books is concerned there is evidence from the models that the whole college is a homogeneous group. A more accurate guide to the pattern of their use can then be found via the issue statistics, but if the whole college proves not to be a homogenous group, issue statistics will only help us if we are able to divide them into the different patterns found. However, since in most cases where the models differed from their straight line, it tended to be at the no books and one book level, almost certainly because these are the returns which we did not receive. Therefore by correcting the model to lie on the straight line, it may well be that we are also putting right the inaccuracies referred to earlier. Table 8 shows the results obtained for length of visits in each college, according to the groups discovered in each college. The results of CHI squared tests to show goodness of fit in each case can be found in Table 8 in Appendix V.A. These tests are included because, in some cases, it is doubtful whether a truly homogeneous group has been found, as the CHI squared test showed a probability of .8 or less. But none the less, there is sufficient evidence for us to accept it as a group until further information falsifies our figures.

Table 8a shows the same information for books used and books borrowed, and Table 8 in the Appendix V.A. shows the relevant X^2 results for these figures. Also included on the Table 8 are the total numbers of visits which were made in each college by each relevant group. It is, of course, necessary to take both the number and length of these visits together in order to get a complete picture of library use.

TABLE 8. LENGTHS OF COLLEGE LIBRARY VISITS

B.Grosseteste	1st years made 550 visits y = .79	$\frac{1}{2}$ lasted 1 hr. or less $\frac{1}{4}$ lasted more than $1\frac{3}{4}$ hrs.
	3rd years made 750 visits y = .76	$\frac{1}{2}$ lasted $\frac{3}{4}$ hr. or less $\frac{1}{4}$ lasted more than $1\frac{1}{2}$ hrs.
B.Lonsdale	1st years made 480 visits 3rd, 4th years made 880 visits y = .76	$\frac{1}{2}$ lasted $\frac{3}{4}$ hr. or less $\frac{1}{4}$ lasted more than $1\frac{1}{2}$ hrs.
Eaton Hall	1st and 3rd years made 1480 visits y = .65	$\frac{1}{2}$ lasted $\frac{1}{2}$ hr. or less $\frac{1}{4}$ lasted more than 1 hr.
	4th years made 220 visits y = .78	$\frac{1}{2}$ lasted 1 hr. or less $\frac{1}{4}$ lasted more than $1\frac{1}{2}$ hrs.
Kesteven	1st years made 1110 visits y = .78	$\frac{1}{2}$ lasted 1 hr. or less $\frac{1}{4}$ lasted more than $1\frac{3}{4}$ hrs.
	2nd years inc.B.Ed. made 360 visits y = .84	$\frac{1}{2}$ lasted $1\frac{1}{4}$ hrs. or less $\frac{1}{4}$ lasted more than $2\frac{1}{4}$ hrs.
	3rd years made 1120 visits y = .84	$\frac{1}{2}$ lasted $1\frac{1}{4}$ hrs. or less $\frac{1}{4}$ lasted more than $2\frac{1}{4}$ hrs.
	4th years made 100 visits y = .9	$\frac{1}{2}$ lasted $1\frac{1}{2}$ hrs. or less $\frac{1}{4}$ lasted more than 3 hrs.
Matlock	1st years made 870 visits y = .77	$\frac{1}{2}$ lasted $\frac{3}{4}$ hr. or less $\frac{1}{4}$ lasted more than $1\frac{1}{2}$ hrs.
	2nd years made 850 visits y = .8	$\frac{1}{2}$ lasted 1 hr. or less $\frac{1}{4}$ lasted more than $1\frac{3}{4}$ hrs.
	4th years made 310 visits y = .87	$\frac{1}{2}$ lasted $1\frac{1}{2}$ hrs. or less $\frac{1}{4}$ lasted more than $2\frac{3}{4}$ hrs.
Nottingham	1st and 2nd years made 2220 visits y = .8	$\frac{1}{2}$ lasted 1 hr. or less $\frac{1}{4}$ lasted more than $1\frac{3}{4}$ hrs.
K.Alfred's	1st years made 680 visits y = .76	$\frac{1}{2}$ lasted $\frac{3}{4}$ hr.or less $\frac{1}{4}$ lasted more than $1\frac{1}{2}$ hrs.
	2nd years made 1020 visits y = .78	$\frac{1}{2}$ lasted 1 hr. or less $\frac{1}{4}$ lasted more than $1\frac{3}{4}$ hrs.
	3rd years made 690 visits y = .77	
Portsmouth	1st, 2nd, 3rd years made 2450 visits y = .72	$\frac{1}{2}$ lasted $\frac{3}{4}$ hr. or less $\frac{1}{4}$ lasted more than $1\frac{1}{4}$ hrs.
	B.Eds. and P.Gs. made 700 visits y = .8	$\frac{1}{2}$ lasted 1 hr. or less $\frac{1}{4}$ lasted more than $1\frac{2}{4}$ hrs.

TABLE 8a. NUMBERS OF BOOKS BORROWED AND USED.

90% of the students used books internally ½ used more than 6 books	77% borrowed books ½ borrowed more than 2 books
82% used books internally ½ used more than 4 books	69% said they borrowed books 44% borrowed according to statistics
90% of the last years and 88% of the 3rd years used books	78% of the last years and 83% of the 3rd years borrowed.
89% used books internally ¼ used more than 12 books	69% said they borrowed books 64% borrowed books ½ borrowed more than 1 book
87% of the 1st years and 90% of the 2nd years used books ½ of the 1st years used more than 5 books, and ½ the 2nd years more than 6.	76% said they borrowed and 68% did borrow books. ½ borrowed more than 1 book
86% ? of the students used books	75% said they borrowed books. 58% did so.
85% of the students used books	70% borrowed books ½ borrowed more than two.
65% of the 1st years and 86% of the rest used books.	about 60% borrowed books less than ½ borrowed more than 1 book.

TABLE 8. LENGTHS OF COLLEGE LIBRARY VISITS - CONTINUED

Sarum St. M.	made 1500 visits y = .76	½ lasted ¾ hr. or less ¼ lasted more than 1½ hrs.
Weymouth	made 2034 visits y = .72	½ lasted ¾ hr. or less ¼ lasted more than 1¼ hrs.
Didsbury	made 4200 visits y = .75	½ lasted ¾ hr. or less ¼ more than 1½ hrs.
Manchester	made 500 visits y = .64	½ lasted ½ hr. or less ¼ lasted more than ¾ hr.
Mather	made 1970 visits y = .75	½ lasted ¾ hr. or less ¼ lasted more than 1½ hrs.
Padgate	made 3000 visits y = .78	½ lasted 1 hr. or less ¼ lasted more than 1¾ hrs.
Sedgley P.	made 2230 visits y = .8	½ lasted 1 hr. or less ¼ lasted more than 1¾ hrs.
Chorley	1st and 3rd years made 300 visits y = .79 4th years made 50 visits y = .81	½ lasted 1 hr. or less ¼ lasted more than 1¾ hrs. ½ lasted 1 hr. or less ¼ lasted more than 2 hrs.
Furzedown	1st and 3rd years made 900 visits y = .71	½ lasted ¾ hr. or less ¼ lasted more than 1¼ hrs.
Redland	made 2472 visits y = .76	½ lasted ¾ hr. or less ¼ lasted more than 1½ hrs.
T.A.S.C.	1st years made 1800 visits y = .75 2nd and 3rd years made 870 visits y = .79 4th years made 610 visits y = .81	½ lasted ¾ hr. or less ¼ lasted more than 1¼ hrs. ½ lasted 1 hr. or less ¼ lasted more than 1¾ hrs. ½ lasted 1 hr. or less ¼ lasted more than 2 hrs.

TABLE 8a. NUMBERS OF BOOKS BORROWED AND USED - CONTINUED.

	about 75% used books	73% borrowed books ½ borrowed more than two books
	82% of the 1st years and 81% of the rest used books	74% borrowed books ½ borrowed more than two.
	86% of the students used books	82% said they borrowed books 77% did so.
		75% of the students said they borrowed books. ½ borrowed more than two.
	80% of the students used books	
	67% of the students used books ½ used more than 2 books	82% borrowed books ½ borrowed more than 3 books
	76% used books ½ used more than 3 books	70% borrowed books ½ borrowed more than 2 books
	about 80% of the students used books	71% borrowed books ½ borrowed more than two.
	about 72% used books	74% borrowed books ½ borrowed more than two.
	80% of the students used books	68% borrowed books less than ½ borrowed more than two.
	about 80% of 1st, 2nd and 3rd years used books. 91% of 4th years used books	72% of the 1st years and 79% of the rest borrowed books ½ of the 1st years borrowed more than 2 books and ½ of the rest borrowed more than 3 books.

14. Interpreting probability model results.

These probability model results can be interpreted in two different ways. Morse envisaged using the models to find out the kind of use made at the time by different groups; in order to decide what changes could be made to the running of the library in order to better suit these use patterns. In other words, it was assumed that the probability models showed not only what was happening but what the users wanted to happen. He therefore argued that if it were shown that, e.g. 30% of the chemists borrowed more than three books in one week, but only 10% of the physicists did so, it was possible to calculate how many people would be thwarted in using the library as they wished if a borrowing limit of three books per week were instituted. But, using the probability models in this way begs the question. It assumes that finding out what readers actually do is useful in bringing library regulations more into line with the users actual pattern forgetting that the users' pattern he has just measured was created by existing library regulations as well as other factors outside his control. Thus if there is already a limit on borrowing books which prevents more than four being borrowed in one week, the fact that no student borrows more than four obviously does not prove that this number is adequate. They cannot borrow more than four anyway. Only by removing the limit, and if the result is that many start borrowing five or six, can evidence be gained as to the justification for that limit in the eyes of the users. Therefore, it is perhaps more reasonable to look at the results obtained on the probability models, compare them with those obtained in other libraries and see if one can ascertain the factors which have produced these results, in order to find out what could be altered if it were felt that the pattern of use should be adjusted in some way. The only way in which it can be decided how this pattern should be adjusted is either for the librarian himself to assume that a certain kind of use is in itself good, or he might ask the users how many books they need to borrow at one time. Thus he might consider that high internal use in comparison with external use was in itself to be encouraged. There remains a general problem of expecting the user to describe the library he would like in terms of libraries he has already met. It is pointless to ask him whether he would like something of which he has no conception.

15. Conclusions.

We have seen that even the students of those colleges which are situated near other large libraries still make their heaviest library demands on their own college library. Of course this is not only what one would expect but is probably as things should be, since it must be appreciated that whilst a public library should be available for students' recreational reading needs, the college library should be responsible for the bulk of course and background reading material for students. In those areas where the librarians are aware of heavy student use of seating space in public libraries, and where students try to submit requests through the I L L service at the public rather than at their own college library, a certain amount of ill-feeling within the public library system twoards students is bound to develop. It is, therefore, necessary for the college library to think of itself as the principal source of supply of all types of material for students.

We shall be looking later at students' book buying, but it is perhaps safe to pre-empt its evidence by remarking that students do not spend the whole of their book grant, and are unlikely to do so. Indeed with spiralling book prices and the increase in the cost of living, with its consequent drop in value of students' grants as a whole, the situation is partly understandable, and with increased inflation college libraries may have to look forward eventually to students buying even fewer books in the future. It is therefore of vital importance that the college libraries should satisfy the need for materials. The probability models reveal very high use of library space and materials by the students. If we take the average opeing hours of a library and relate them to the number of students likely to be visiting the library and the length of their visits we can get some idea of the extent to which library space is occupied during the day. This can also be related to the peaking of this demand during each day which is caused by the kind of time-tabling and varying use due to teaching practice, examinations etc. Information on this can be found in Part II Sections 11 and 17.

It should be noted, however, that the use does vary considerably from one college to another. Some of these colleges keep annual issue statistics and from these a rough figure for the average number of books borrowed per year per student can be calculated. (See table below). It is interesting to compare these with the information we have found.

AVERAGE ISSUES PER STUDENT PER ANNUM

College	Average Issues	College	Average Issues
T.A.S.C.	83	Nottingham	54 (books only)
Weymouth	74	Portsmouth	46 (approx.excl.staff)
Furzedown	68 (books only)	Manchester	44 (approx.)
Redland	62 (books only)	Sedgley P.	43
Eaton Hall	61 (excl. staff)	K. Alfred's	40
Kesteven	60 (approx.)	B.Grosseteste	36
Matlock	59	Mather	31
Didsbury	59 (excl.staff,bks only)	B. Lonsdale	22
		Chorley	21 (approx.)

N.B. In a few cases, approximate figures have been estimated from the issues obtained during the survey weeks. All other figures are based on annual issue figures.

We have already referred to some of the factors which may affect library use and have noted that many of these are extraneous to the library. Those which are within the purview of the library include the adequacy and availability of the stock, and the opportunities available for guidance and help to users, all matters which are considered in detail elsewhere in this report. If we are to accept that college libraries should be fairly self-sufficient, and provide much of the material students need even during vacation, the stock they carry should be carefully chosen and cover a broad spectrum of knowledge. If this expense is to be justified intensive use must be shown to occur. In many cases this is already so, but will only remain so, and where necessary increase, where more serious consideration is given to those factors which affect it.

16. Further Surveys Needed

In the light of what has just been said and of information so far obtained, it would seem profitable for future research to investigate the following areas:

1) Students and staff who do not use libraries, and therefore probably, in our case, failed to return their questionnaires, to find out why this is so.

2) The factors which discourage students from studying in a library.

3) The types of material for which other libraries are used.

4) The possibility of other types of cooperation between libraries in a given area. *

5) The way in which students spend their time in the library. Activity sampling is probably called for to investigate how students browse, how long they really spend searching for known titles, etc.

* At present being investigated by the Library Cooperation project at Sheffield University, Postgraduate School of Librarianship and Information Science.

6) The effect of main subject of study on library use. In the past, surveys have usually been stratified by year group. Future surveys could usefully be stratified by subject group.

It would be most enligntening also to obtain in any survey the users' own comments on their library use. It was found that very little response was obtained to the one open-ended question we asked concerning reasons limiting other library use. There is, therefore, an apparent need for carefully worded questions asking students about their use of any libraries, and the extent to which libraries fulfil their needs.

References.

Butcher, H.S	Sampling in Educational Research - Statistical guides in Educ. Research No. 3 M.U.P. 1965.
Coggins, A M.	A Study of public library users in the City of Bath. thesis. Loughborough Library School and University of Technology. 1970
Morse, P.H.	Library Effectiveness: a Systems Approach M.I.T. 1969.
Line, M B.	The College Student and the Library. University of Southampton Institute of Education, 1965.

PART V.B. STUDENTS' BOOK BUYING HABITS.

BEST COPY AVAILABLE

Introduction

1. Background to the investigation.

In Part V.A we considered the major sources of books for students in colleges of education. Apart from libraries of various types, there remains one further source not yet considered. That is the purchase of books by the students themselves. Since those students who receive LEA grant theoretically have within it a sum earmarked for the purchase of books, stationery, and equipment, it is a matter which should be taken into consideration.

This subject has also been a matter of considerable discussion in many different places in the last few years. For example, there were suggestions in the Parry report which concerned the possibility of giving this part of the grant in token since the evidence available suggests that students do not spend the whole of the earmarked grant on books and similar materials. Several recent surveys have included questions eliciting information on how much is spent on books by students, and several people have calculated the total amount of money which is apparently allocated to students for this purpose, showing that it is very much more than the total library book budgets allocated to their colleges. Suggestions for dealing with this matter have been numerous.

This subject is obviously of interest to the librarian because he constantly feels the need for more money to make his stock adequate for the users needs, and he also suffers from the problems attendant on the need to heavily duplicate certain titles and the sudden demand for the same small group of books by a large group of students.

It seemed, therefore, useful to investigate this matter in the hope of obtaining answers to the following questions. How much are students spending on books and equipment at the present time ? We hope to compare this with the results which have been obtained elsewhere and in the past. Does this spending vary very much according to the subject the students are studying ? How do students decide which books to buy, and how successful does their choice prove to be as regards the usefulness of these books? Do students prefer certain methods of receiving information about books and of obtaining such books ? What is the attitude of lecturers towards students' book buying, and what kind of guidance do they give ? How far do staff and student opinions relate on these matters ?

2. Methodology

To obtain this information a survey of staff and students was carried out at College A in the Spring term of 1971. It was necessary for it to be late enough in the year for most of the students' buying to have been completed. This was perhaps a little too early, and higher figures could have been obtained in the Summer term. However only one student indicated a figure to cover purchases for the part of that academic year still to come. Students were asked how much they spent on books, what kinds of book lists they received, how useful they found them, and various questions concerning the preferred methods of obtaining book materials. As the purchase of materials and equipment can be a major type of expenditure for some students, questions on this were also asked. At the same time the staff received a questionnaire asking them for details concerning the advice they gave on books for purchase, the time at which they gave this advice and their views as to suitable methods of making sure that students have the books they need. Examples of these two questionnaires can be found in Appendix V B.

As a result of the analysis of these questionnaires other possible types of question presented themselves as did some problems concerning the reaction at College A to the questions originally asked. New questionnaires for both staff and students were formulated based on the information which had been gained from the initial survey, which thus took the form of a pilot run. The best time for issuing such a survey is obviously the end of the academic year, but unfortunately at this time we were already into June in the last year of our project. It was therefore found possible to use this survey in only two colleges, one of which had not taken part in the survey of use. In this college, G, a small sample survey of 100 students was taken and run by a group of the college's own students. In the other college, an attempt was made to survey the whole of the student population, but because it was so close to the end of term only about half the students actually received forms and only about 10% of those were, in fact, returned. About a quarter of the staff returned questionnaires. Examples of these questionnaires can also be found in Appendix V B.

In addition to the questionnaires further information was obtained from book shop managers in some of the colleges involved, both by means of written questions and, in one or two cases, by interview, and we received college booklists and comments from the librarians and some interested lecturers.

3. The Student Surveys

The average amounts per student per year were found to be as follows:

	College A £	College G £	College B £
1st year	26	42	42
2nd year	16	27	20
3rd year	14	21	29
4th year			
P.G.	7		
Overall Average	14	30	30

These averages include spending on materials and equipment as well as on books. Three other recent surveys into spending by students at colleges of education produced annual overall averages of £20, £16, and £9, but these figures do not include materials and equipment. Surveys carried out in the mid sixties into spending by students at all types of institutions produced averages of £10, £11, £15 and £30 per student. Considering the increase in book prices, if these figures are accurate it would seem there has been a decrease in the number of books bought for the ensuing years, since the amount spent apparently remains about the same.

In two of the three colleges surveyed there seemed to be a considerable degree of dissatisfaction with the booklists students received. This dissatisfaction applied particularly to lists issued at the beginning of the first academic year. Many students complained that books they had bought at that time proved of no use to them during the course and they were therefore discouraged from making later purchases. There was a great desire for some system to make sharing between students more satisfactory and for the provision of access to second-hand book materials.

In spite of their stated suspicion of college lists, most students did buy a lot of their books from such lists, though a smaller proportion did so at those colleges which complained about the list than did those at that college where there were fewer such complaints. From this college there were some very useful comments on the suggestions made in the questionnaire concerning departmental collections and collections of multiple copies. Many students referred to their need to read widely for their individual work and to the need for current books which a multiple copy collection is unlikely to be able to supply. It was felt such a collection would rigidify book choice. Also it would inevitably include only those books which were on lists. There appears to be some correlation between students buying very few books and students saying that the books are not useful. Those who received most satisfaction from their purchases were generally those who bought the most and they were also more likely to buy books not directly connected with course needs.

For most students the biggest expenditure was in the field of Education. Table 1 in Appendix V B shows the proportion of books bought in Education, main subject and other categories and money spent on equipment and material. Education books amounted to about one third of the total expenditure on books and main subject to about one quarter. At College G many of the students stated that it was the Education books on their list which proved to be of no or little use, while the subject books were of considerable use. Two students referred to the importance of opportunities to evaluate books recommended before buying them. One stated, 'I never buy books before I can assess them'. The other pleaded for the opportunity to evaluate books before purchase.

Table 1 below shows the number of books which were in fact included on their lists, and which were bought by the sample in these two colleges.

College G	No.of books bought	No.of these listed.
1st years	184	49
2nd years	92	36
3rd years	72	45

College 3	No.of books bought	No.of these listed
1st years	144	114
2nd years	81	49

It is noticeable at College G especially that even in the first year very much less use is made of these lists. At College G detailed book lists are sent to all students before the commencement of their first year and 95% of the students remembered receiving this list. Many students remembered having bought books on the list, the highest number under any one heading being 19 books on Education by Maths students. Only two third year students felt that all these titles had been useful, 13 felt that most had been useful, 16 that some, 8 that few and 6 that none had been of use during the course.

Only 6% of the students stated that they preferred to receive recommendations for purchase in a pre year list, as against 6[illegible]% who preferred books to be recommended by lecturers at the time they became relevant during the course. One student suggested using a list but that its contents should be assessed by the lecturer during the first lecture of each course. Others suggested it would help if the lists were marked to indicate those books which were most necessary. There was a feeling amongst most students that lists should exist and be available from the beginning of the year,and onlyin this way was it possible for them to make use of second-hand stocks.

At the third college students took particular exception to the suggestion that the bookgrant be made in the form of a token. The reasons given were as follows: (1) book tokens would result in "starving students". (2) Such tokens would preclude secondhand buying. (3) Such a system would be open to abuse, because some students would sell their tokens to others, or buy books for their personal interest and relaxation rather than for study purposes. (4) The system would not help those who do not receive a grant. (5) In some subjects a large amount of the grant is needed for equipment which could not be obtained with book-tokens. (6) There would be a problem in administering book-tokens since they are rarely worth the same amount as the cost of a particular book.

There were also comments from other students at this college about the inadequcy of a departmental book collection since it could not stock a wide enough range of books and there would never be enough copies available at peak periods of demand.

The suggestion that departments should keep a book collection met with a response from some students that they would rather such activity be undertaken by the library, since materials there were available for longer periods of the day and there seemed to be a feeling that such a collection would be better administered by the library and that items would be more likely to be available from their stock. One student at College G seemed particularly biased against any kind of library type provision of books especially a subscription based one on the grounds that books are always being taken illicitly, and are never available on the shelves when needed. Another student believed that many students did not appreciate or treat bookscorrectly, and that the contents of such a collection would be badly handled. He objected to his money being misused by other students in this way. There was again a strong feeling that it was necessary for students to learn for themselves how to choose books, and that a part of their education would be lacking if the choice was always made for them. One student, who had spent far more than the earmarked bookgrant on books. and who usually bought secondhand ones, recommended that rather than a voluntary subscription to a departmental library, the DES should prescribe that a portion of each student's bookgrant be given direct to the college library. Most students seemed to prefer to have books recommended to them during lectures. They felt more confident that these would be of use to them. They also asked that cheaper books should be recommended and that lists should indicate in some way which items were really necessary. Inevitably there were some conflicting requests. One student wanted all books to be listed at the beginning of the year, so that book sales could be taken advantage of, others asked for book requests to be more spread over the year, instead of always making demands on one part of the grant. Again some students asked for very clear advice stating exactly what they should buy, whereas others referred to the need for students to find the material which is most useful from their point of view, and asked forfreedom to buy other than from the book lists. There seemed to be a regular desire for contact between tutors and the library so that books were not recommended for purchase which were available and not in heavy demand in the library.

It is obvious that many students give considerable thought to the purchase of books and other materials and that there is considerable dissatisfaction with the type and extent of advice they get and with the availability of suitable materials at the time they need them. One student referred to the need for advance notice to be given to bookshops about texts which were going to be in demand. The present writer remembers the frustration as a student of attemptint often at the expense of considerable time, to obtain copies of books which were not available in any local bookshops, and which, when ordered, frequently arrived when the main need for them had passed. Nevertheless, the survey shows that the major consideration where student book buying is concerned is the unwillingness to spend so much money on books. It seems that over the last few years the proportion of the maintenance grant earmarked for book and equipment purchase has increased at a higher rate than the proportion intended for maintenance, and since the cost of living has increased at a faster rate for most things it is perhaps understandable if the students find it necessary to use some of the bookgrant money for other needs, especially if parents do not make their full contribution to grants. "It should also be borne in mind that the cost of books has risen by 53.5% between September 1965 and September 1972, while average cost of other items covered by the 'book grant' has risen by just under half this figure over the same period".*

The later questionnaire was also analysed according to the main subject of the student in the hope of finding out how far the subject affected the type of use. Since so few replies were received from both colleges, each subject group is very small, in fact usually containing only one person, and never more than eight. Nevertheless some surprising agreements were obtained between the colleges. For example, Divinity proved to be a high cost subject in both colleges, both for books and for equipment and materials. At both colleges, English students appeared to spend little on main course books, this in spite of earlier surveys, such as Line's survey, College of Education students in the Southampton ATO, which showed that English was the next most book based subject to Divinity. At one of these colleges, Physical Education proved to be the most expensive subject in both the first, second and third year, in direct contradiction to Line's findings at Southampton, where it was amongst those subjects where least was spent. It is also interesting to see that Maths. students seem to spend heavily on Education in both colleges and quite heavily on personal books in one college, although according to Line they were amongst the lowest spenders. Table 2 in Appendix V B shows the average spending by students in each department in each year group for these two colleges, but it must be remembered that as they are based on such small student numbers the results could simply show extreme types of behaviour.

4. Staff Surveys

At College A the Educational Resources Committee makes annual recommendations to Education, main, subsidiary and curriculum departments as to the total value their recommendations for book purchase should not exceed (See question No.1 in Appendix V B). The staff were asked whether they took note of these in making recommendations for book purchase. The actual figures for the year of the survey are on the questionnaire in Appendix V B. At this time the book grant allocation was £38. and it can be seen that practically the whole sum has been allocated, thus ignoring the fact that students might need to buy materials and equipment and may also reasonably wish to spend some of their bookgrant on books selected by themselves. From the results shown in Table 1 it can be seen that studens in general spent very much less than these recommended amounts except for school curriculum work and teaching practice. Another librarian also expressed surprise that this list recommended less for education in the first and second year than it did in subsequent years. With the exception of the fourth years it is noticeable that student spending in this field declined markedly from year to year.

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* Awards to Students. An interim Review Memorandum submitted to the Secretary of State for Education and Science NUS October 1972 Appendix A.

The questionnaire used at the other two colleges asked staff how much they expected students to spend on books for each of their courses. The overall pattern which emerged suggested that students should spend about £27. in the first year, £11. in the second and £15. in the third. These figures are very much higher than the actual expenditure recorded by students. However, the recommended spending figure made by most main subject staff was very low, with the exception of first year Divinity, where a figure of £15. was suggested. We noted in the earlier part of this report that Divinity was one of the departments whose students spent most on main subject materials, but they did not spend as much as this. In most other cases, however, students said they spent rather more than staff seemed to consider the minimum necessary. It should be noted that several staff said that the figure they gave was a basic minimum.

At College G a detailed book list for first years is produced prior to their coming up, and is checked by the librarian to ensure bibliographic accuracy and also to enable a check to be made that the amount of spending involved falls within the recommendations of the academic board for each section. Students receive this list prior to coming to college and it is expected that they will buy some books before coming up and others on arrival. A book display is put on for this purpose. It is interesting to note that it is from this college, where the first year book list is so carefully organised, that complaints have most often come from students about the lack of usefulness of material on such lists. At the other college and for other year groups of this college, book lists are more sporadic and depend on the decision of individual departments and staff.

Several staff in all colleges referred to the fact that they did not require students to buy books, only to read them. They generally recommended books which were available in the library and mentioned the library to the students when making recommendations. Others referred to recommending only paper backs and to gearing their recommendations to students' specific needs and interests. Another referred to recommending new books throughout the year as they became available.

We noticed amongst the students some dissatisfaction with book lists as a method of recommendation. Some students stated that it would help if they were better guided through the book lists by comments on the most important books. Staff were asked whether they thought some such method would be useful and how they would do it. Several replied that they would list books in the order of important, putting first general background books (this especially in the field of Education), and following up with the more specific titles. It is worth noting that it is these same general background books in education which students claim they bought and found no use for. Whether this is because staff took it for granted that the students would read the books they bought as general background or whether the students really didn't need to read them remains to be seen. If the former is the case we must obviously learn from this that students who are told to buy a book must also be told to read it, and there must also be some follow-up of the reading of the book.

It is surprising to find that the English staff feel that quite low expenditure on books is possible and do not seem to require students to make very many purchases, although they do recommend heavy library use. In the experience of the library, English is a heavily book-based subject, and it is surprising to find such low expenditure in this field. This is also what has been found in other fields of research where English students have tended to be amongst the heaviest spenders. One would expect both more willingness on the part of the staff to encourage students to buy the type of book which they may wish to own and refer to for the rest of their lives than to buy books which will only be used for a very short period during a course and which they will not wish to use ever again. Several staff, however, referred to the importance of a good secondhand market for books of this type and those who suggested the need for bookshops often included the rider that it should sell or handle secondhand material as well. Some of the staff were very aware of the need to encourage and guide in book buying, by seeing that listed books should be "an essential part of the structure of the course, continually in demand for reference and reading. It is important to avoid recommending books which are regarded as peripheral to the course". There were also references to the need for providing different types of advice and guidance for students from different backgrounds. If this idea and the earlier statement about recommending books geared to students' specific needs and interest were really acted upon, book buying advice would become very much a part of the tutorial activities of a college, since it would have to be done on an individual basis and would become extremely time consuming. Since some of the staff obviously feel strongly that buying books is 'a good thing', and students should be encouraged to own them, it may be that more positive steps of this nature would be useful.

A surprising number of staff said that they did not always check bibliographic data. The price was particularly often left off and sometimes it was not known whether the book was in print or not. One lecturer stated that he usually recommended very recent publications and, therefore, he did not check whether they were still in print. The present writer recently saw a booklist from a college not involved in this survey, where the price of every item on the list was wrong. Bearing in mind that one lecturer stated that there is no easy way of knowing whether books are in print, there would seem to be a case for liaison here between the lecturing staff the library and students, both those currently on the courses concerned and those who have recently completed these courses, not only for the purpose of checking lists, but also to improve coordination between book stocks, students' purchases, and books available in local bookshops and other libraries.

5. College Bookshops

Not all colleges have bookshops on their campus, or are they always necessary. The librarian of College G informs us that there are two bookshops within 10 minutes walk of the college and one of these has an area set out for books for the college, in the order in which they appear on the list. However, we have noted that staff have referred constantly to the belief that student book buying would be encouraged if there were shops on the college campus. We have also noted that the students may be discouraged from buying if they are constantly frustrated by an inability to acquire books at the time they need them.

There are considerable problems attached to the setting up of such a shop. In order to be profitable, it is necessary for such a shop to also sell the stationery materials which students are likely to use. Yet it is common for the students' union to provide this service and as the union benefits from the profits they are loth to see it in the hands of a commercial bookseller. On the other hand, the unions are usually incapable of handling very much in the way of books. Nonetheless, some students' unions do run quite efficient secondhand book stalls and provide lists of books available and lists of books in heavy demand. These may not always be very accurate or up to date, but may serve as a useful guide to students.

However, activities of this nature run by the students depend upon satisfactory cooperation which can vary considerably from year to year. Purchases by the library are a vital factor in bookshop economics.

We interviewed two bookshop managers and some librarians obtained further information from their managers. Most managers reported that the majority of books bought were paperbacks and there was unwillingness to buy books costing more than 50p. each unless they were essential. Most books bought were educational and set books rather than recommended books. One bookshop did report a slight increase in book buying over the last four years (but see figures below).

Information on book shop takings in different years at one college.

Year	Cash takings during 1st week of March	
1970	£87	(870 students)
1971	£120.80	(940 ")
1972	£144.72	(940 ")

Taking into account rise in cost of books and in college population there may be a downward trend in actual numbers of books bought per student according to these figures.

Information from the same bookshop concerning spending by students during first four weeks of academic year on books for courses and on books on college lists.

Department	Purchases of book list items	Other subject purchases
First years (3 yr.course)	£810.14	£294.05
Mature students	36.50	
Religious studies	1.95	14.70
History	5.80	10.75
Geography	236.85	23.87
Environmental science.	32.72	
Drama	33.45	
English	46.60	45.70
Art & Design	2.52	5.25
Music	45.90	
Physical Education	21.10	
Social science.	48.62	5.06
Biology.	-	8.20
Mathematics.	-	37.00
	£1330.	£436

Total sold (specified above)	£1,766
Total bookshop sales	£2,274

95% of purchases were probably from first years and the total may represent 90% of what they spent on books. There were about 300 students in the first year concerned. They have, therefore, spent, on average, about £6. each.

This same college noted that B.Ed. students showed greater willingness to buy books than Certificate of Education students.

All managers have referred to the importance of receiving advance warning of what books are to be recommended. Some referred to problems arising from booklists containing inaccurate information. In conversation, one bookshop manager referred to the fact that students do not necessarily buy those books which the staff think they will buy, and that acting too closely upon advice in lists can leave them with large numbers of unwanted stock. Comments from city booksellers on this subject also refer to the problems caused by staff changes. One member of staff may have advised them to stock a large number of copies of a book which a colleague shortly afterwards may recommend students not to buy as being an unsuitable title. The shop again has unsaleable copies on its hands.

Conclusions

In this bookbuying field, students seem to have some illfeeling towards their staff, but also some very useful and practical ideas as to how matters could be improved. The staff of the colleges also have made more suggestions than we have seen in published form and often their recommendations are more practical than the latter. The surveys which we have carried out have been, of necessity, very small and therefore no detailed analysis or correlations of the results are possible. Further investigations of this nature would be useful in this field. A questionnaire similar to ours would produce and stimulate considerable comment from both types of use.

References

University Grants Committee	Report of the Committee on libraries. HMSO 1967 (Parry Report)
Line, M.B.	The College Student and the library. University of Southampton Institute of Education. 1965.
N.U.S.	Awards for Students: An Interim Review. Memorandum submitted to the Secretary of State for Education and Science. N.U.S. 1972.

BIBLIOGRAPHY

ATCDE	College of Education Libraries. Recommended standards for their development. ATCDE/LA. 1967.
ATCDE	Interim recommendations on additional book grants for Coll. of Ed. courses leading to B.Ed. degrees. ATCDE/LA. 1969.
ATCDE	Higher Education and Preparation for Teaching: A policy for Colleges of Education. ATCDE. 1970.
ATCDE	Summary of Teacher Training Courses at Colleges and Depts. of Education. ATCDE. 1971.
British Standards Institute	Glossary of Terms used in Work Study. BS. 3138: 1969. BSI. 1969.
Bateman, R.	Selection of books and periodicals, *Libraries in Colleges of Education* Library Association. 1972.
Bristol University	University of Bristol Library. Annual Report of the Librarian. 1970/71.
International Association of Technological University Libraries	Educating the library user: Proceedings of the Fourth Triennial Meeting 1970. ed. C.M. London. IATUL Univ. of Technology Library, Loughborough. 1970.
Buckland, M.K. and others	Systems Analysis of a University Library: Final Report on a Research Project. University of Lancaster Library Occasional Paper No. 4 . 1970.
Buckland, M.K. and Woodburn I.	An Analytical Approach to Duplication and Availability. University of Lancaster Occasional paper, No. 2. Lancaster. 1968.
Buckland, M.K. and Woodburn I.	Some implications for library management of scattering and obsolesence. University of Lancaster Occasional paper No. 1. Lancaster. 1970.
Bundy, M.L. and Wasserman, P. ed.	Readers in Research Methods for Librarianship: Reader series in Library and Information Science. NCR Microcard. 1965
Burkhalter, B.R.	Case studies in systems analysis of a university library. Scarecrow Press. 1968.
Burnett, A.D.	Reader failure: a pilot survey, Durham University Library. Research in Librarianship Vol.1 No. 6, June 1967.

BEST COPY AVAILABLE

Butcher, H.S.	Sampling in Educational Research: Statistical guides in Ed. Research No.3. M.U.P. 1965.
Cadney, D.	Finance in Libraries in Colleges of Education Library Association.1972.
Coggins, A.M.	A study of public library users in the City of Bath. Thesis, Loughborough Library School and University of Technology. 1970.
DES	College letters. 2/68 Library bookstocks and bookfunds in colleges of education 1968. 6/69 Voluntary college estimates 1969/70 4/70 " " " 1970/71 1/71 " " " 1971/72 7/72 " " " 1972/73
DES	Teacher Education and Training: A Report by a committee of inquiry appointed by the Secretary of State for Education & Science under the chairmanship of Lord James of Rusholme. HMSO.1972.(James Report).
DES	Second Report of the Committee on non-teaching staff in maintained colleges of education. DES March 1968. (Odgers Report).
DES	The Library in Colleges of Education: A report of Two Conferences held in November 1968.
Dougherty, R.M. & Heinritz, F.J.	Scientific Management of library operations, Scarecrow Press. 1960.
Edwards A.J. & Shercliff W.H.	Scope and function of Colleges and their libraries. in Libraries in Colleges of Ed. Library Association. 1972.
Fothergill, R.	A challenge for librarians? A report on the joint NCET/ASLIB Audiovisual Group Conference on Multi-media Resource Organisation in Higher Education, held in Hull in December 1970. Working Paper No. 4 NCET in association with ASLIB Audiovisual Group.1971.
Gilchrist, A.	Work study in libraries. J. of Librarianship Vol. 2 No. 2 April 1970.
Goldhor, H.	Research Methods in Librarianship: Measurement and Evaluation. Illinois U.P. 1967.
Gordon,Graham, W.	Comparative Book-buying Habits: Letter to the Observer, 1972.
Graves, K. & Lippett, E.C.	Survey of the County Library Services Management Services Unit. Hertfordshire. County Council. 1968.

Humphreys, K.W.	The Subject Specialist in National & University Libraries. Libri 17. 1967.
Library Association	NUCM Libraries committee.Colls of Ed. sub-committee.Staffing in colleges of education libraries. Library Association Record 72 (2) February 1970.
Library Association	Professional and Non-Professional Duties in Libraries. Library Association.1963.
Library Association	Survey of College Libraries. Library and Information Bulletin No. 15. L.A. 1971.
Line, M.B.	Library Surveys. Bingley. 1969.
Line, M.B. and others	Information Requirements of College of Education lecturers and Schoolteachers. INFROSS Research Report No. 3. Bath University Library. 1971.
Lomax, D.	Focus on Student Teachers, Higher Education Review, 3.1. Autumn 1970.
MacArthur, B.	New Horizons for Education. Council for Educational Advance. 1970.
Mann, P.H.	Books: Buyers and Borrowers. Deutsch.1971.
Millins, P.K.C.	New Challenge to Library Services. Times Higher Educational Supplement. 11.2.72.
Morse, P.M.	Library effectiveness: A Systems Approach. MIT. 1968.
Murdoch, J. & Barnes J.A.	Statistical Tables for Science Engineering and Management. 2nd. Ed. Macmillan.1970.
NUS	The Education and Training of Teachers: Perspectives for change. Memorandum submitted... to the committee of Inquiry into the Education and Training of Teachers... (James Report) NUT. 1971.
Nesbitt, J.E.	Chi Square: A statistical guide to educational research. Manchester U.P. 1966.
Nottingham University	Report 1970/71.
Peacock, P.G.	The Short Loan Collection in a University Library J. Librarianship. 4 (2) April 1972.
Platt, P.	College of Education Libraries. 2nd. Ed. Library Association. 1972.

Raffel, J.A. & Shishko, R.	Systems Analysis of University Libraries: An application of the cost-benefit systems to the M.I.T. libraries. MIT. 1969.
Reading University	Report of the curators of the library, 1970/71.
Reid - Smith, E.R.	Report of a survey carried out by questionnaires issued to students and members of staff to obtain information on the use of books and libraries. Thesis, Didsbury College of Education, 1966.
Richmond, W.K.	The Teacher, his work and training in Aspects of Education. 9. Education for the Seventies. Ed. F.W. Garforth, University of Hull. Institute of Education, 1969.
Roberts, N.	Colleges of Education libraries: a cause for concern. J. of Librarianship 3. (3) July 1971.
Robinson, F. & others	Systems Analysis in Libraries. Symplegades No. [illegible]. Oriel Press. 1969.
Shercliff, W.H.	College of Education Libraries, in British Librarianship & Information Science 1966/1970 . Ed. by H.A. Whatley.
Slater, M. and Fisher, P.	Use made of Technical Libraries. ASLIB Occasional Publications No. 2. ASLIB. 1969.
Smith G.C.K. & Schofield, J.L.	Administrative Effectiveness: Times and Costs of Library Operations, J. Librarianship 3 (4) 1971.
Smith, R.M.	Staffing and control in colleges of education libraries: A report of a survey of 41 college libraries. Education Libraries Bulletin No. 40 Spring 1971.
Tillyard, S. & Shercliff, W.H.	Staffing in Libraries in Colleges of Education. Library Association, 1972.
Tipper, D.M	The Reservation System: An Examination of its contribution to an effective circulation system in a Coll. of Ed. Library. Education Libraries Bulletin No. 44. Summer 1972. University of London Institute of Education.
University Grants Committee	Report of the Committee on Libraries HMSO. 1967, (Parry Report).
Urquhart, J.A. & Schofield J.L.	Measuring readers' failure at the shelf. in Journal of Documentation 27 (4) December 1971. pp. 273-286.

Urquhart J.A. & Schofield J.L. Measuring readers' failure at the shelf in three university libraries. Journal of Documentation Vol.28, No.3, 1972

Vickery, B.C. Methodology in Research. Aslib Proceedings Vol.22 No.12. 1970 pp. 597-607.

Warwick University Library Report for the Session. 1970/71.

Whatley, H.A. (ed). British Librarianship and Information Science 1966-70. Library Association. 1972.

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